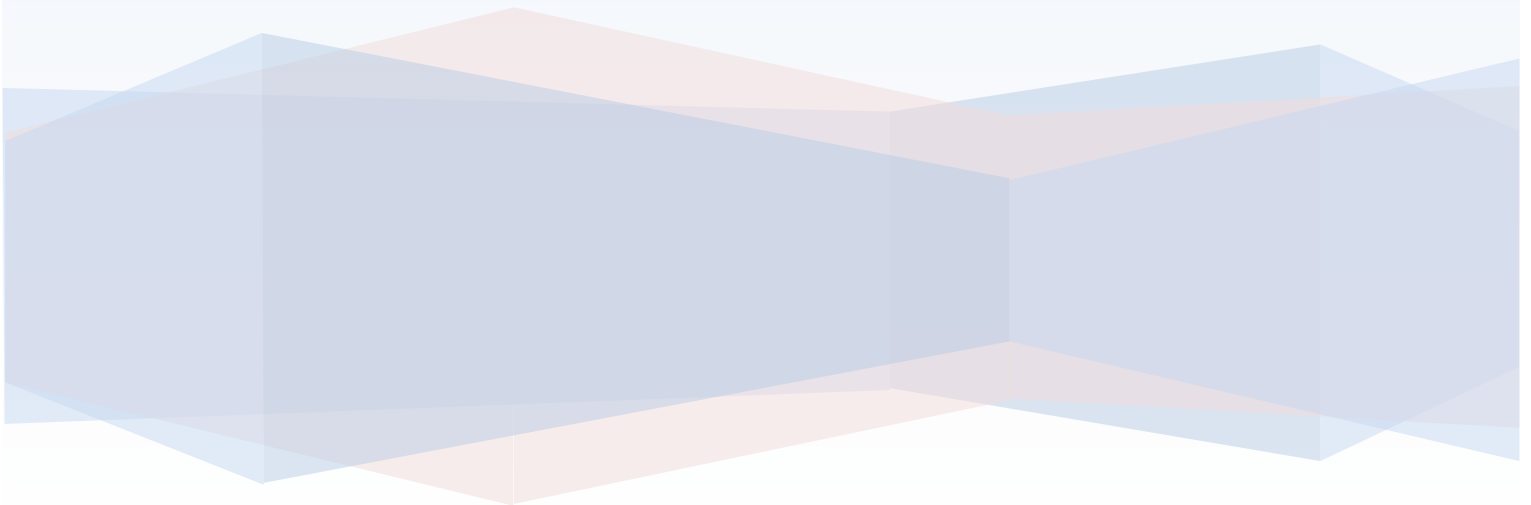


Quantifying Workplace Inclusion

The success of workplace inclusion initiatives requires a suitable set of metrics to quantify the impacts of these efforts. This article introduces one such set of metrics to diversity and inclusion practitioners.

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About the Author

Nurur Rahman is a Data Scientist. Trained as an astrophysicist, he loves to work on various research areas that reside under the hood of Data Science. He currently works on several topics that are within the domain of Talent Science. These include modeling employee attrition, understanding workplace diversity and inclusion, and corporate brand analysis.

Acknowledgements

The author thanks Stela Lupushor, Sharon Doerer, and Josephine Carola for many useful discussions that helped him understand the context of workplace inclusion.

Executive Summary

Diversity and Inclusion (D&I) are two distinct organizational practices that play critical roles in driving the workforce dynamics. It is well recognized that diverse and inclusive organizational culture promotes creativity and innovation. It is, therefore, imperative that, to have a sustainable growth in the competitive market, organizations must take appropriate actions to implement these practices and measure their impacts on the workforce.

While workplace diversity metrics are well-known and readily available to D&I practitioners, the concept of measuring workplace inclusion is relatively new and is rarely described in organizational literature. The unavailability of useful inclusion measures undermines an organization's efforts to understand, recognize, and improve the existing culture of the workforce.

To help D&I practitioners to succeed in workplace inclusion initiatives, in this article, we introduce a collection of seven metrics to effectively measure employee's perception of workplace inclusion. The set of metrics include decision-making influence, access to critical information (to do the job), job security, individual well-being, job satisfaction, organizational commitment, and workgroup integration. These metrics have been studied in Organizational Psychology and Organizational Management literature and have shown to be effective in measuring workplace inclusion.

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The Big Picture

Research studies show that an organization upholding diverse culture is the one that fosters innovation and creativity. It attracts and retains the best talents. It also increases customer satisfaction and loyalty and thus increases market share among people with different ethnic backgrounds. A diverse culture enhances an organization's image in the global market and enhances its competitiveness in the talent pool [1,2,3,4].

The workforce of organizations has become increasingly diverse. To tap the benefits of diversity, therefore, organizations recognize the strategic importance of maintaining a diverse and inclusive corporate environment.

The positive effects of diversity led to a growth of interest in recent years to have a better understanding of D&I and to develop effective methods to quantify their impacts. While D&I practitioners have developed straightforward ways of measuring workplace diversity, they have found it challenging to define useful workplace inclusion metrics. As a result they use various ad-hoc measures, which do not provide an accurate operationalization of the concept of workplace inclusion. This possesses a challenge to D&I efforts taken by an organization to understand the culture of its workforce [5].

To understand what measures have been developed, studied, and used by scholars to define and effectively measure workplace inclusion we conduct an extensive literature search. A thorough review of the literature yielded seven metrics that have been shown to be effective measures of workplace inclusion. These metrics contains both indicators and outcomes of inclusive organizational practices. These measures are broadly studied and examined in Organizational Psychology and Organizational Management literature [5,6,7,8,9,10,11,12].

Diversity and Inclusion at the Workplace

Values, policies, and practices together form the core culture of an organization. Diversity and Inclusion are two organizational practices that establish parts of the core culture.

The term diversity refers to a set of demographic variables including race, religion, color, gender, national origin, disability, sexual orientation, age, education, geographic origin, and skill characteristics. It includes the differences and the similarities in the norms, beliefs, identities, and views among employees of a business institution [13].

Diversity initiatives reflect the intents of an organization to improve its corporate culture by acknowledging demographic differences. A one-way street can symbolize the notion of workplace diversity, where intentional communication ensues from the organization towards its employees.

As we mentioned before the diversity has positive impacts on workforce dynamics. However, one can leverage the real power of diversity only by practicing inclusive policies at the workplace.

The perception of workplace inclusion can be viewed as a two-way street where the employee and the corporation must communicate with each other about their shared expectations as well as individual roles and responsibilities. This bi-directional link benefits both parties. See Figure 1 below for a schematic view of inclusion.

The notion of inclusion originates as a result of the balanced and constructive interaction between the values and beliefs of individuals who are coming from diverse demographic backgrounds, and the policies and practices of an organization [12,14].

Workplace Inclusion : A Two-way Street Communication

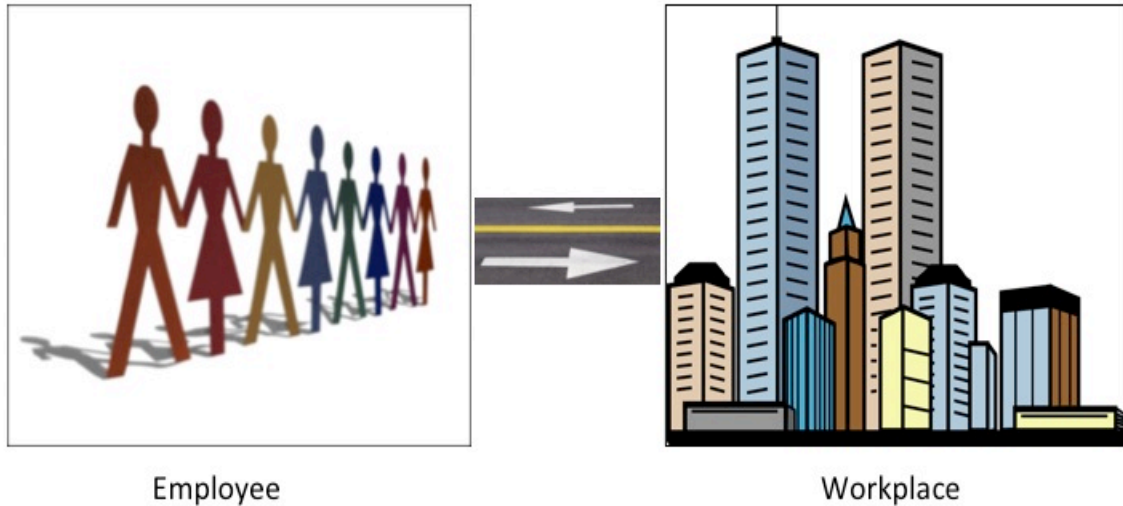


Figure 1

A critical component of the two-way street model (shown above) is the *intent* or the *desire* expressed by an organization to create an inclusive work environment. The other component is the employees' *positive experience* of inclusion within the setting of a workplace environment. The notion of inclusion, therefore, can be conceptualized at both macro and micro levels. At the macro level it reflects an organization's intention and at the micro level it is represented by the employees' experience of inclusion.

Image Credits in Figure 1:

Employee Diversity Image:

http://www.stopgap.com.au/uploads/ctas/blogs/AUS_blog_images/millennial_women_employees.jpg

Two-way Street Image:

<http://pmafulfillment.com/cms/wp-content/uploads/2015/03/two-way-street.jpg>

Office Building Image:

<http://www.clipartlord.com/wp-content/uploads/2014/03/buildings3.png>

Workplace Diversity Measures are not the same as Workplace Inclusion Measures!

The outcomes of workplace diversity initiatives are visible (such as gender or ethnic diversity in an office). Creating diversity metrics is simple and involves easy to use mathematical principles. Diversity metrics that are commonly used in the industry include percentage of male and female employees; percentage of minority employees across various management tiers, compensation groups and job locations; employee promotion rates; participation in employee resource group (ERG) initiatives etc.

The literature focusing on practicing, managing, and measuring diversity and related programs within an organization is well established. D&I professionals routinely use the above-mentioned metrics to measure the progress of these initiatives.

The measurement of workplace inclusion, however, can be both simple and complex depending on the context of interest. Whereas the measurement of inclusion at the macro (organization) level is straightforward (described in the next section), it is subtle at micro level [5].

The experience of inclusion at the micro level is intangible by nature and can only be ascertained indirectly through its impact on individuals. This requires designing specific surveys to obtain insight about employee's experience of inclusion. D&I professionals are either simply unaware of this fact or despite their knowledge they lack appropriate data to measure it.

In addition, it should be stated here that organization's interest in measuring workplace inclusion is a recent phenomenon. As a result the practitioners find that this type of measurement has not been featured often in organizational literature. So far only a handful of studies have specifically address the concept [5,6,7,8,9,10,11,12].

Because of these limitations D&I professionals use “diversity management” as an approach to tackle inclusion related issues. However, the measurement of workplace inclusion does not mean the management of diversity because the latter simply indicates activities related to recruitment, development, retention, and utilization of personnel from different educational, cultural, and social backgrounds [9,15].

Most of the organizations that are taking recent initiatives to understand workplace inclusion use ad-hoc measures to identify inclusion. Quite frequently the proposed inclusion measures are simple extension of diversity metrics such as professional development plan usage, future demographic targets, performance rating distributions, promotion representation, and ERG participation by various demographic groups.

The use of imprecise inclusion metrics poses a challenge to D&I managers who struggle with what to measure and how to quantify the impact of inclusion programs in the organization. This increases the chance of a “missed opportunity” for Human Resource (HR) leaders because, without appropriate instruments to describe organizational inclusion, they fail to demonstrate the value that HR can add to overall organizational processes and culture [12,15].

Workplace Inclusion Metrics

Research studies show that employees perceive diversity and inclusion as two conceptually distinct practices. Diversity focuses on organizational demographic blend and inclusion removes obstacles so that members from different groups work in harmony and achieve desirable business outcomes [9,16]. It is, therefore, only practical to use two distinct set of measures to quantify the outcomes of each of these practices.

Workplace inclusion metrics encompass measurements at the organization (macro) level as well as at the individual employee (micro) level. We provide a selection of metrics covering both levels. However, we note that these two lists do not form an exhaustive set of workplace inclusion metrics. Rather they constitute a representative sample of metrics that have been studied extensively in the organizational behavior literature.

Macro or Organization Level Metrics:

Macro level metrics contains **homogeneity of pay scale, homogeneity in the rate of promotion, equal opportunities for professional development, and leadership commitment to workplace diversity and inclusion.**

We do not address macro level metrics in this article since the construction and the measurement of these metrics are relatively easy. All one needs is the historical data. The data sets from HR information system (HRIS) including headcount, mobility, promotion, performance rating, and various developments opportunities can be combined to construct these metrics.

Micro or Individual Employee Level Metrics:

At the micro level, metrics include **decision-making influence, access to critical Information (to facilitate the job), job security, individual well-being, job satisfaction, organizational commitment, and workgroup (social) integration.**

The construction of micro level metrics is the main focus of this article. Building these metrics involves conducting surveys of the employees. The employee engagement survey is a frequently used method to measure employee's perception of workplace inclusion.

Some researchers categorize micro level metrics into two groups [5,8,11]. The first group has metrics that are known as the *antecedents*, *originators*, or *indicators* of the experience of workplace inclusion. These metrics include decision making influence, access to critical information, and job security. The second group contains metrics that are identified as the *outcomes* of workplace inclusion. These metrics are individual well-being, job satisfaction, organizational commitment, and workgroup integration.

Below we provide a brief description of these metrics. We highlight the aspects of employee's experience that can be depicted by using them. For each metric, we also include the representative questionnaire that has been used in the literature to probe employee's experience.

Antecedents of Workplace Inclusion

Decision-Making Influence

Decision making influence is the individual power of an employee. It provides her/him necessary control in making decisions that directly affect her/him or the work that s/he does. This empowerment is an essential requirement to create an inclusive atmosphere because through this enablement an employee perceives the degree of autonomy, the extent of participation, and the level of responsibility to perform the job.

An employee uses this awareness to interact with the work environment to find whether or not her/his input is sought, valued, and used to redefine work practices. An employee's perception about her/his decision-making capability directly impacts other job related phenomena such as individual well-being, job satisfaction, commitment, and group integration [6,7,17,18,19].

Sample survey questions:

- a) Do you have influence over decisions about ways to improve your productivity?
- b) Do you have influence over decisions about ways to improve the quality of your work environment?
- c) Do you have influence over decisions about the ways to improve the quality of products and services that are regularly used by your colleagues?

Access to Critical Information

Access to job related critical information is an important characteristic that a work environment must have to promote or create an atmosphere of inclusiveness. It measures the degree to which an employee is kept well-informed not only about her/his job but also about the group/company business objectives and plans. An experience of persistent difficulty in getting access to the flow of essential information that is necessary to get the job done will lead the employee to lose motivation for the job, to raise questions about the true intention of the workplace and to develop a sense of exclusion. This negative experience of exclusion, along with other undesirable incidents, may encourage the employee to leave the organization [6,7,16].

Sample Survey questions:

- a) Are you well informed about the company goals?
- b) Are you well informed about the technologies to make your daily work easier?
- c) Is technological support readily available to improve the quality of your daily work?
- d) Does your manager always share the necessary information to get the job done?

Job Security

Instilling a sense of job security in the employees' mind is one of the prerequisites in creating an inclusive work environment. Job security is the perception of the likelihood that an employee will retain her/his job. While job security does not always mean that a person is an insider in the workplace, however, organization may show acceptance of a person (with high skills or with exceptional talent) by giving that person a stable job.

Job security and friendship at workplace goes hand in hand. People seek to establish harmony at work by creating an amicable relationship with their peers. This is important because friends can be a source of decision-making influence. Friends can also be a source of critical information to do the job. Friendship among co-workers, therefore, plays a critical role in facilitating organizational inclusion because people tend to feel less insecure and uncertain among friends [6].

Sample survey questions:

- a) How unlikely do you think that you will be laid off?
- b) How secure do you feel in your position?
- c) How friendly is your work environment?
- d) Do you consider your colleagues as friends?

Outcomes of Workplace Inclusion

Individual Well-being

The term well-being generally refers to having a positive experience of mental, spiritual, social, economic, or physical aspects of life. An inclusive work environment that provides a sense of acceptance, a sense of belonging, and a sense of respect for individuality can profoundly influence an employee's mental and physical state. The inclusiveness of the workplace is an important enabler that offers a positive personal experience to the employee [8,24].

Sample survey questions:

- a) Do you feel a sense of happiness when you think about your (work) group members?
- b) Do you feel a sense of attachment to your group or manager?
- c) Does your affiliation with the group or the manager give you a sense of satisfaction?
- d) Does your affiliation with the group or the manager make you feel confident?
- e) Do you have an overall positive experience in your job and with company culture?

Job Satisfaction

The term job satisfaction is defined by an individual's sense of contentment or progressive emotional response towards her/his job. It is a collection of positive feelings that an employee has about the current job. Various work related factors are directly linked to job satisfaction including pay scale, promotion opportunity, mentoring and supervision, professional growth, type of work, co-workers, and work environment. An inclusive work atmosphere maintains a balance in all these areas and thus helps an employee to have a positive job experience [7,8,18,20,21,25].

Sample survey questions:

- a) Are you generally satisfied with your job?
- b) Are you generally satisfied with the type of work you do on daily basis?
- c) Is the work that you usually do seem interesting to you?
- d) Are you given the chance to do things you do best?
- e) Are you given the chance to decide how to do your work?
- f) Do you get a sense of accomplishment through your job?
- g) Are you satisfied with the salary that you receive for your job?
- h) Do you think there is opportunity for promotion in your job?
- i) Is your supervisor competent in doing her/his job?
- j) Do you like your co-workers?
- k) Do you frequently think of quitting your job?

Organizational Commitment

Organizational commitment is defined by the degree to which an employee identifies with the organization. It is an action that connects an employee with the workplace and expresses her/his loyalty to the organization. Organizational commitment is generally characterized by three related factors: 1) a strong belief in organization's goals and values, 2) a willingness to exert considerable effort on behalf of the organization, and 3) a strong desire to maintain membership in the organization [8,20,21,22,23,24,25,26].

Sample survey questions:

- a) Are you willing to put in a great deal of effort beyond what is normally expected in order to help this organization be successful?

- b) Do you mention about this organization to your friends as a great organization to work for?
- c) Would you accept almost any type of job assignment in order to keep working for this organization?
- d) Do you find your personal values and the organization's values are very similar?
- e) Do you feel proud to tell others, including friends and relatives, that you are a part of this organization?
- f) Does this organization inspire you to do the best in your job performance?
- g) Do you care about the fate of this organization?
- h) Do you consider this organization as the best among organizations that you had worked before?
- i) Do you feel a sense of loyalty to this organization?

Workgroup Integration

The objective of workgroup or social integration is to create a stable and unbiased working atmosphere where group members, irrespective of their backgrounds, can actively contribute to group goals. To create such an integrated group one must embrace the value of diversity and use suitable processes to ensure equal opportunities for each member regardless of gender, age, or ethnicity. The process of social integration helps group members achieve their full potential by focusing on a common goal. Successful group integration is reflected in the attraction to the group, satisfaction with other members of the group, and social interaction among the members [7,27].

Sample survey questions:

- a) How attractive is the group's work dynamics to you?
- b) How satisfied are you with the group members?
- c) How do you feel when you socially interact with the group members?

From Metrics to Measurements

The following steps highlight the process that starts from selecting a micro level metric to the measurement of employee's perception of workplace inclusion using that metric:

Step 1: Select a Metric

A D&I practitioner should select a metric depending on the interest. For example, if one is interested in probing employee's experience of workplace inclusiveness then s/he should select the metric from the group of antecedents. If one already has the data that firmly support the existence of an inclusive work environment then s/he might be interested in the analysis of the impact of inclusion. In that case the selection of metrics should come from the group of outcomes.

Step 2: Select a Set of Questions

Each metric should contain a set of questions or items appropriately chosen. The selection of questions for the metric would depend on the context and may vary from what has been reported in this paper.

Step 3: Select a Scale

To convert a questionnaire into a quantitative measure, one needs to convert the response of each question into a numeric scale. This scaling of a response is a well-known technique in psychometric analysis and is commonly known as a Likert scale.

A Likert scale is basically the sum of responses on several related questions. A range of integer numbers is usually chosen to match the scale. This can be illustrated by the following example: "Do you think the current health care reform will ultimately benefit the citizens of the USA?" If one researcher chooses to represent the response of this question by a 7-point scale then this scale can be written as 1: strongly disagree; 2: moderately disagree; 3: slightly disagree; 4: neither disagree nor agree; 5: slightly agree; 6: moderately agree; 7: strongly agree. The number of points associated with a scale, however, is arbitrary. For example, some researchers prefer to use 5-points scale by combining points 2 and 3 above into one single point (and label it as "disagree") as well points 5 and 6 into another single point (and label it as "agree").

Likert Scales with 9-point scale or 11-point are other commonly used scales [28,29].

Step 4: Conduct a Survey

The data to construct the metric(s) must be obtained from surveys conducted throughout the organization or from targeted groups within the organization. If multiple metrics are chosen for the survey then the questions from these metrics must be placed in random order in the survey to avoid ordering effect [28].

Step 5: Check for Internal Consistency Reliability of Questions

Provided that the employees' responses to the questions are recorded through the survey, the responses must pass the internal consistency reliability test.

The metrics should be constructed by combining multiple questions in such manner that the response of each item must be consistent with one another. This is achieved when the responses to the questions produce similar numerical scores. This can be illustrated by the following example: if an employee expressed agreement with the statements "I like the work dynamics of my workgroup" and "I like to spend time with the members of my workgroup outside work", and disagreement with the statement "I am dissatisfied with the attitudes of the workgroup members", this would be indicative of good internal consistency of a test that probes, for example, "group integration". The test of internal consistency is critical because, for a given metric, it basically measures how good the selection of the questions is [28].

Step 6: Refine the Set of Questions

Keep only those questions that passed internal reliability consistency test in step 4. For a given metric, refine the set by dropping those questions that failed the test.

Step 7: Express the Metric Numerically

A numerical value of the metric is obtained by summing the score of each question from the revised set in step 6 and then calculating the mean. This is the simplest approach where each question is assumed to have an equal weight.

Step 8: Analyze the Results and Understand Organization's Culture

This is the final and the most interesting step. However, before conducting any analysis D&I practitioner must anonymize the survey data to protect the privacy of employees. When this is done, the numerical score of the metric can be used to know employee's perception of workplace inclusion. For example, if a metric is chosen from the group of antecedents, then the score will reveal whether or not employees perceive the workplace as inclusive (giving high score) or exclusive (giving low score).

The survey data should be grouped by gender, ethnicity, age, job tiers, length of tenure, and geographic locations etc. to get the collective or high-level views of the organization's culture. The collective information is critical for benchmarking purpose. Benchmark analysis provides a clear picture of the organization's culture with respect to its peers and thus reveals useful information regarding the success or the shortcomings of D&I initiatives.

A Final Remark:

We should emphasize here that the aforementioned steps provide a simple guideline on how to measure employee perception of inclusion using a single metric. However, conducting an organization-wide survey using a single a metric is not practical since a single measure may not capture the complete picture of the work environment. The D&I practitioner should, therefore, choose a group of metrics that serve her/his purpose the best before designing the survey.

Conclusions

The old maxim that says "what gets measured gets done" simply tells us that measurements provide insights that can be leveraged to achieve the objective for which the measurements were designed. Before we start measuring something we first have to define and identify metrics that are appropriately aligned with business goals.

Since D&I are two conceptually distinct organizational practices, to quantify individual impacts it is only reasonable to use two distinct sets of metrics. While workplace diversity metrics are readily available to D&I practitioners, the concept of measuring workplace inclusion is relatively new and there is a lack of a general consensus of what to measure to demonstrate the presence or absence of workplace inclusion. The lack of useful inclusion metrics challenges an organization's efforts to understand the culture of its workplace.

To help D&I practitioners to succeed, especially in inclusion initiatives, we introduce a collection of seven metrics to measure employee's perception of workplace inclusion. These metrics have been studied in Organizational Psychology and Organizational Management literature and have been shown to be effective in measuring workplace inclusion. We also provide step-by-step guidelines starting from selecting a metric to the measurement of employee's perception of workplace inclusion using that metric.

Future work within the industry will test these perceptual measures by linking them to outcomes. Scores on employee surveys that correlate to the metrics, such as performance rating, will lend confidence that a workplace does not only "feel inclusive" to employees, but is actually inclusive in terms of critical employee outcomes that have important implication for business goals.

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Appendix 1: Two Faces of Workplace Inclusion

At the micro (individual employee level) the perception of workplace inclusion can be viewed in two different ways. On the one hand, it has a work-related component that represents the degree of assimilation of a person to the working environment. On the other hand, it has a relational dimension that corresponds to the degree of acceptance of a person by others in the workplace [9].

The work-related metrics include individual well-being, job satisfaction, organizational commitment, job effectiveness, decision-making influence, access to Information, and job security. The only relation-oriented metric that is incorporated in our list is workgroup integration. There are several other relational metrics identified and studied by [9].

Appendix 2: Workplace Inclusion Metrics in Absence of Survey Data

The micro (individual employee) level inclusion metrics presented in this article depends on survey data. In absence of survey, however, we can construct a simple inclusion metric using HRIS data by combining employee tenure and job performance rating. Information from these two attributes can be used to indirectly probe employee's level of obligation or attachment to the organization.

Let us call the metric as (employee) **Attachment**, which can be defined as follows:

$$\text{Attachment} = T \ \& \ R / A$$

T = Employees with tenure at least 3 years or more

R = Employees with performance rating at least 4 or 5

A = Employees with all tenure levels

This above expression finds the subset of employees who stay within the company for more than 3 years and who provide excellent service during those years that are reflected in their performance ratings [1].

We use three years in tenure as a cut-off in defining Attachment for two reasons. First, it typically takes about three years for an employee to grow professionally using various training and development activities provided by her/his workplace. Second, organizations usually provide various types of benefits that mature after three years from the commencement of the job. After maximizing the gains from these two prospects employees with low level of obligation tend to leave the organization for better opportunities. Those who continue to work for the company could do so either because of a true commitment to the organization or for various personal reasons. A practical and useful way to differentiate between these two groups is to use job performance rating. A truly committed or attached employee is the one who would not only feel obliged to stay with the company after receiving all the benefits but would also contribute the most (through better performance) for the benefit of the organization.

One caveat that we should keep in mind is that job performance rating available in HRIS data must be unbiased and should not be affected by the employee's age, gender, or racial background. This data quality issue must be resolved before constructing the metric.