

Building a Framework for an Inclusive Workplace Culture: The Diversio Diversity and Inclusion Survey

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Abstract

Reliable and valid methods are imperative to assess any organization's diversity and inclusion practices. Therefore, the Diversio Diversity and Inclusion Survey (DDIS), an instrument built on a framework of five core themes (inclusive culture, fair management, access to networks, flexible working conditions, and safe working environment), and designed to measure inclusion metrics for organizations, was tested to examine its psychometric properties. The DDIS was developed through a collaboration of industry experts, including those with the Canadian Council for Aboriginal Business (CCAB) and the LGBTQ Chamber of Commerce. Initial testing and focus groups with over 60 participants belonging to equity-deserving groups ensured the instrument had good content validity. After the initial testing, pilot testing involving a diverse sample of working adults from 25 companies in Canada, the U.S., and the United Kingdom was completed. Psychometric properties of the 5-item DDIS scale were examined based on a cross-sectional survey of 8,800 working adults from various industries worldwide. The internal consistency reliability of the scale was analyzed using Cronbach's alpha coefficient¹. The Cronbach alpha was 0.840 with all item-total correlations greater than 0.5. Therefore, the DDIS, which has good content validity and good internal consistency, should prove helpful in conducting assessments of diversity and inclusion culture and practices at any organization. In addition, organizations can survey their employees to gather relevant information to drive policy and organizational change.

Keywords: diversity, inclusion, scale development, survey, workplace culture

Publication Type: research

Introduction

Currently, organisations are witnessing an upward trend of diversity among their workforce, prompting changes in management practices, organisational values, and priorities (Boekhorst, 2015). Movements associated with the growing diversification of the workforce include globalisation, flattened corporate hierarchies, technological innovation, high immigration rates, and increased participation of minority groups (e.g., women, ethnic/racial minorities, LGBTQ groups, and persons with disabilities) (Downey et al., 2015; Fassinger, 2008; Mor-Barak & Levin, 2002; Shore et al., 2018). A diverse workforce is instrumental in elevating an organisation's performance and competitive edge; hence, the need for creating a thriving environment is imperative and has prompted the adoption of diversity management. Recently, there has been a shift in discourse from diversity to inclusion, to creating an inclusive climate to harness the potential of a diversified staff fully and to reaping the accompanying benefits (Klarsfeld et al., 2012; Nair & Vohra, 2015).

With increased attention to diversity and inclusion (D&I) in the workplace, there is a need to appreciate the contextual meaning of these concepts. Often, diversity and inclusion are used interchangeably; although interrelated, they are conceptually different constructs. Workplace diversity has been defined as "the set of individual, group, and cultural differences people bring to the organisation" (Prasad et al., 2006). The set of differences includes variability in the demographic composition of a

workgroup such as differences in race, gender, sexual orientation, disability status, and the different group of values individuals bring to the organisation, for example, work culture, cognitive and behavioral styles (Konrad, 2006; Prasad et al., 2006). For practical reasons, the endgame for most organisations is to achieve demographic and thought diversity (Nair & Vohra, 2015).

On the other hand, Shore et al. (2011) define inclusion as “the degree to which an employee perceives that they are an esteemed member of the workgroup through experiencing treatment that satisfies their need for belongingness and uniqueness” (p. 1265). In the workplace context, “inclusion” represents an individual’s ability to access information/resources, actively participate in decision-making processes, and contribute fully to an organisation (Roberson, 2006). Looking at both concepts, as Shore et al. (2018) elucidate, diversity highlights differences in the demographic composition and values in groups or organisations, while inclusion prioritises greater involvement and participation of all members of an organisation to leverage diversity effects/benefits.

Irrespective of industry, a diverse and inclusive culture in the workplace provides immense benefits. The Mor-Barak et al. (2016) meta-analysis focusing on diversity and inclusion in the workplace concludes that leadership effort at advancing inclusion and diversity was significantly associated with only positive outcomes, compared to when diversity alone was the focus (resulting in positive and negative consequences). The Mor-Barak et al. (2016) study highlights the importance of promoting both concepts at the individual and organisational levels. When organisations prioritise D&I, compelling evidence shows that marginalised and non-dominant groups (e.g., women, ethnic minorities, LGBTQ individuals, people with disabilities) benefit immensely. Increased job satisfaction, prospects for growth/advancement, commitment, and better overall physical and mental health are associated with increased diversity and inclusion (Bond & Haynes, 2014). In addition, policies that promote diversity and inclusive practices at the organisational level produce higher competitive advantage, increased productivity, attraction and retention of the best talents, employee satisfaction and loyalty, and better business performance and practices (Bond & Haynes, 2014; McCuiston et al., 2004).

With the increased awareness and growing importance of D&I, it is crucial to identify workplace factors affecting their acceptance and implementation. Often these factors are specific to certain environments (i.e., type of industry, geographical location), making it essential to identify them with that context in mind (Konrad, 2006). Industry experts and researchers investigating D&I at the workplace suggest that these factors may be emerging primarily from organisational culture, hiring processes, available resources, remuneration, communication methods, and leadership/management style (Boekhorst, 2015; Bond & Haynes, 2014; Buttner & Lowe, 2017; Konrad, 2006; Kossek et al., 2017; Schmidt et al., 2017). These factors may promote, or hinder D&I practices in the workplace, thus, amplifying the need for identification and measurement. Therefore, there is a need for a standardised and validated assessment tool that identifies and measures the degree to which varying perceived factors may promote D&I practices or undermine its integration in the workplace. With such an assessment measure, organisations can effectively address workplace barriers to diversity and disburse resources to boost inclusion practices.

Considering the need for a validated tool that identifies workplace factors and their impact on D&I, an assessment tool, the DDIS, was developed by Diversio Inc., a company of subject matter experts that measure, track, and improve diversity, equity, and inclusion at organisations using artificial intelligence technology and sophisticated data analysis. The DDIS is an instrument that assesses the degree of diversity and how individuals feel engaged and included in the affairs of an organisation or workplace. A consortium of subject experts, equity-seeking-group associations, academics, and senior executives of different industries were also instrumental in developing the DDIS. The DDIS was designed to reflect the current research and advancement on D&I applicable to various organisations.

In this study, we provide elucidation for the five themes that the theoretical framework for the DIS is built around and test the measure’s psychometric properties, focusing on its reliability. The paper consists of two sections; the first expands on the five core themes that undergird the DDIS. The second investigates its reliability: the internal consistency of items on the DDIS.

Conceptual Framework for the Diversio Diversity and Inclusion Survey

Recently, there has been much discussion surrounding D&I in literature, and researchers have identified several themes associated with diversity and inclusion in the workplace. The authors of the DDIS built the survey on a framework based on knowledge of best practices, a review of the current literature on diversity and inclusion, and the internal Diversio Inc's research data from 20,000 companies worldwide. The authors identified five core themes: inclusive culture, fair management, access to networks, flexible working conditions, and a safe working environment.

Inclusive Culture

Based on the Optimal Distinctiveness Theory (ODT), two broad themes conceptualise inclusion in the workplace (Shore et al., 2011). The first theme, belongingness, represents acceptance for all employees, regardless of status, position, or demographic group. At the same time, uniqueness welcomes and respects the contribution and perspectives of all employees, irrespective of cultural differences (Shore et al., 2011). Building on these themes, inclusive culture involves adopting the principles, practices, and policies that foster a sense of belongingness and uniqueness in an organisation (Boekhorst, 2015). Nishii (2013) further expands on inclusive culture, where individuals are treated fairly, valued, and participate in decision-making processes irrespective of background.

Further, inclusive culture at the workplace addresses assimilation (conforming to the dominant culture), which hinders perceived belongingness among marginalised individuals, especially racial minorities. Assimilation requires surrendering one's traditions and views in favor of those exhibited by the dominant group in return for acceptance (Bond & Haynes, 2014; Fields, 2009; Yang & Konrad, 2011). In addition, organisations with an active, inclusive culture intentionally eschew issues such as tokenism, color-blindness, and other subtle exclusionary acts (Bernstein et al., 2020; Fields, 2009; Prasad et al., 2006).

In the workplace, leadership plays a significant role in creating a culture of inclusivity (Gill et al., 2018). Mor-Barak et al. (2016) define an inclusive leader as one who looks beyond individual differences (e.g., race and sexuality) but values unique talents and leverages different perspectives diverse individuals bring to the table. Other complementing factors to cultivating an inclusive culture at the workplace include increased employee engagement, empathy practice, provision of adequate resources, and team building (Boekhorst, 2015; Mor-Barak & Levin, 2002; Shore et al., 2018). Team building in this context encompasses all activity that fosters unity, inclusion, collaboration, and communication between a diverse group of individuals.

Inclusive culture forms the bedrock for adopting and applying D&I policies and practices. The importance of an inclusive culture at any organisation includes growing benefits of better team rapport, improved team performance, enhanced employee well-being, increased job commitment, and an established positive climate for diversity (Shore et al., 2018).

Fair Management

Feedback and reviews are critical day-to-day activities in any organisation. Organisational leadership uses feedback and reviews to evaluate and praise positive performance, or in other cases, constructively criticise erring behavior or performances, which in the long run tracks team members' progress and professional development. When used appropriately, feedback and reviews are valuable at individual and management levels. It provides a transparent apparatus to appraise staff performance and target areas for growth and development.

In the context of diversity and inclusion, the feedback and review process is a valuable performance-enhancing activity when implemented fairly and transparently. Unfortunately, certain groups often receive negative and unflattering feedback, with data showing that existing performance review systems are biased against non-dominant group employees (Konrad, 2006). Further, women are often shortchanged by these reviews, with data showing that women are 1.4 times more likely to receive

negative critical feedback (Cecchi-Dimeglio, 2017). Biased management, in combination with dishonest and vital feedback and reviews, leads to low morale, little or no commitment, job dissatisfaction, low self-efficacy, poor retention, and high turnover of employees (Chandler, 2012; Saunderson, 2004).

Biased management may also lead to harmful practices such as nepotism, favoritism, and cronyism in the workplace (Arasli & Tumer, 2008; Padgett & Morris, 2005). Individuals traditionally privileged by workplace systems (white, heterosexual, male, and non-disabled) often benefit from positive feedback, giving them opportunities for career advancement at the expense of others (Konrad, 2006). Nepotism may propagate homogeneity, introduce subtle and overt discrimination, and influence recruitment practices that hinder diversity and inclusion building (Jones et al., 2007; Konrad, 2006). In addition, biased performance evaluations and feedback lead to inequitable pay distribution, especially for women and ethnic minorities (Buttner & Lowe, 2017; Fassinger, 2008). According to data from Statistics Canada, full-time working women made an average of 87 cents to every dollar earned by men (Pelletier et al., 2019). This disparity was wider for Indigenous, racialised, those living with disabilities, and immigrant women (Pelletier et al., 2019; M. Williams, 2018). Further, Mor-Barak & Levin's (2002) findings show that women are more likely to receive critical reviews, receive less recognition and earn less despite similar performance levels as their male counterparts.

Management practices that provide unbiased feedback and reviews are necessary to improve the D&I culture in the workplace. It ensures transparency and equal access to opportunities, breaks the proverbial "glass ceiling" for under-represented groups, fosters growth/productivity, improves team morale, increases talent retention, and improves organisational diversity (Bond & Haynes, 2014; Schmidt et al., 2017).

Access to Networks

Access to networks is a critical component of D&I culture at the workplace. Access refers to the availability of opportunities and equitable access to opportunities, regardless of individual ability or experience (Tan, 2019). Access to networks provides opportunities for active participation and engagement for marginalised groups and eliminates perceived or actual obstacles that stifle career growth/advancement (Tan, 2019). In the D&I context, network access appraises how employees feel they have management's support and investment in their growth and development. Employees with access are provided opportunities to showcase their talents and develop within their organisation. Notably, room for career growth/development, mentorship, training programs, and networking opportunities are essential facets of network access.

Increased opportunities for career development are evidential benefits of increased access to the workplace, especially for marginalised groups. Unfortunately, systemic barriers often targeting marginalised groups are the "glass ceiling" and "sticky floor" phenomenon. Glass ceiling is a term used to describe systemic barriers that women and racialised groups experience while attempting to rise through organisational ranks (Bond & Haynes, 2014). The sticky floor phenomenon explains the uneven clustering of specific individuals in low-paying or entry-level positions with limited opportunities for upward mobility (Bond & Haynes, 2014; Harlan & Berheide, 1994). In addition, existing evidence shows that women, racial minorities, and individuals living with disabilities make up a large proportion of employees in human resources, home health, administrative services jobs, and frontline roles. The over-representation in such frontline positions furthers career inequality and limits access to networks and opportunities compared to white men (Bond & Haynes, 2014; Kossek et al., 2017).

Training, networking, and mentorship are essential components of access to networks. Training provides education on self-awareness, self-reflection, and reduction of bias and perceptions that concern the provision of access to marginalised groups (Gill et al., 2018). Mentorship is of particular interest since it guides an often complicated and tumultuous career path in big organisations, especially for racial minorities (Fredette et al., 2016; Konrad, 2006). Unfortunately, recent evidence indicates an unequal availability/access to support networks and mentors (Fassinger, 2008). By their demographic similarity to the leadership/administrative team, specific individuals find it easier to connect and access mentors

than individuals who do not share such demographic similarities (Davis et al., 2016; Konrad, 2006). In other cases, mentees belonging to non-dominant groups may experience difficulties establishing enriching relationships with mentors, especially from different demographics, with outcomes often to the mentee's detriment (Konrad, 2006).

Access to networks is vital in fostering an inclusive climate at the workplace. In organisations with equitable access to resources and opportunities, there is a significant increase in team integration, knowledge sharing, learning, networking, and career advancement (Bond & Haynes, 2014; Podsiadlowski et al., 2013). In addition, organisations that guarantee access to networks establish a stable work environment that retains a diverse and talented pool of staff (Konrad, 2006; Podsiadlowski et al., 2013).

Flexible Working Conditions

Organizations have often sought ways to improve the working conditions of their staff to enhance job performance and overall productivity. As a result, flexible working conditions have grown in popularity because of increased calls for work-life balance, rising work-related stress, and the rallying cry for a diversified and inclusive workplace (Kelliher & Anderson, 2010). In addition, the COVID-19 pandemic has contributed to significant demand for flexible working options (Forbes et al., 2020). Flexible work encompasses all working conditions, including reduced hours, remote work, time off, compressed working time, and atypical working hours (Kelliher & Anderson, 2010).

Remote work has been the subject of much research since it is a necessary form of flexible work. Despite the benefits associated with remote work (e.g., work-life balance), certain employees do not have the option of working remotely and face increased difficulties (Kelliher & Anderson, 2010). Marginalised groups do not always enjoy the luxury of working remotely due to systemic barriers placed on them by the nature of their jobs, which are mostly frontline, non-salaried, and low-status (Abril, 2020; Brown, 2018; Konrad, 2006). The lack of choices marginalised groups, especially women, experience is evident in disrupted work-life balance, slower upward mobility, and high attrition rates (Kossek et al., 2017).

Access to parental leave is an essential feature of an inclusive culture and flexible working environment. Due to increasing numbers of women in the workplace, discussions regarding parental leave have gained traction. However, certain employees may not have opportunities to access paid parental leave or are forced to return to work prematurely. Additionally, prejudicial stereotypes and bias, especially towards women (e.g., maternal wall, a form of discrimination faced by pregnant women or working mothers in which they are perceived as less competent or committed to their jobs by colleagues and the organisation) (Williams & Multhaup, 2018), play a role in limiting opportunities for parental leave, leaving the affected parties with tough career decisions, and added stress (Kossek et al., 2017). Research has identified significant evidence of mental strain in employees with no access to flexible working policies with provisions for parental leave (Kelliher & Anderson, 2010; Williams & Multhaup, 2018).

Flexible work conditions are particularly crucial for ensuring workers' health and well-being. The benefits of flexible work are evident at both the employee and organisation levels. At the employee level, flexible work is significantly linked to positive outcomes such as higher job satisfaction, autonomy, low-stress levels, and work-life enrichment (Greenhaus & Powell, 2006; Kelliher & Anderson, 2010). For parents, these benefits are more pronounced, as it provides the flexibility to maintain a healthy work-family balance. At the organisational level, employers report increased overall productivity, attraction/retention of talent, low absenteeism, and higher employer loyalty and commitment when employees receive a range of flexible work options (Kelliher & Anderson, 2010; Konrad & Mangel, 2000).

Safe Working Environment

Safe working conditions include all policies, and ethical and behavioral standards put in place to ensure the safety of all employees. An increasingly diverse workforce and the growing call for inclusivity have necessitated workplace designs that prioritise psychological safety and safe working conditions (Adams et al., 2020; Downey et al., 2015). Psychological safety in the D&I context is the intentional

establishment of healthy and consistent social systems that allow individuals full expression and engagement in a safe environment (Kahn, 1990). Unfortunately, despite the growing awareness and need for safe working conditions, marginalised groups are often at the receiving end of unsafe working conditions and experience adverse employment outcomes and negative impacts on their health and wellness (Butler-Henderson et al., 2018; Magalhaes et al., 2010).

Inclusive leadership is crucial in any organisation because leaders are responsible for creating a safe working environment for subordinates through transparent, respectful, and accessible personalities (Adams et al., 2020). On the other hand, toxic leaders rely on a culture of fear, bullying, disrespect, and aggression towards their subordinates. In doing so, they deliberately create unsafe and hostile conditions for employees, further jeopardising an organisation's goal of inclusion (Singh et al., 2018).

Workplace discrimination is another factor contributing to unsafe working conditions (Adams et al., 2020; Bond & Haynes, 2014; Mor-Barak & Levin, 2002). Discrimination at the workplace may present as restricted or limited access to opportunities, unfair feedback/evaluation, and inequitable distribution of rewards (Adams et al., 2020). In other instances, discrimination can be interpersonal and appears as verbal harassment, incivility, and bullying (Adams et al., 2020; Raver & Nishii, 2010). Harassment is also tied to discrimination or may appear on its own and manifest in sexual, verbal, and physical forms (Adams et al., 2020). Typically, there is no access to recourse in unsafe working conditions, and the systems suppress complaints and punish attempts to seek justice (Adams et al., 2020; Raver & Nishii, 2010).

Regardless of its presentation (subtle or overt), the impact of unsafe working conditions is telling, particularly on individuals belonging to marginalised groups. Evidence shows that marginalised groups overwhelmingly experience employment and sex-based discrimination, including discriminatory recruitment practices, unfavorable job evaluations, wage disparity, bullying, and sexual harassment (Adams et al., 2020; Bond & Haynes, 2014; Konrad, 2006). Toxic leadership and discrimination also hinder complete assimilation and diminish marginalised staff's self-efficacy and confidence, resulting in physical and mental strain (Adams et al., 2020; Schmitt et al., 2014).

Creating a safe working environment is a vital ingredient for maintaining a thriving workplace and ensuring the overall well-being of all workers, especially members of the non-dominant group. In addition, safe working conditions strengthen workplace diversity and facilitate seamless integration of inclusive practices that ensure employee commitment and participation.

The five themes discussed are essential components of a theoretical framework elucidating a diverse and inclusive workplace. As observed in the literature and identified among qualitative responses in past surveys (free-text data from the DDIS), the core themes may roughly be grouped into sub-themes that provide further contextual meaning. Figure 1 provides a detailed representation of the framework used to design the DDIS.

Methods

Development of the Diversio Diversity and Inclusion Survey - Psychometric Properties

The survey was developed to assess perceptions of D&I of working adults in various industries around the globe, especially within North America. Based on internal data and literature sources on D&I, a team of industry experts and researchers from Diversio Inc drafted the survey questions. In addition, industry stakeholders, including the Canadian Council for Aboriginal Business (CCAB) and the LGBTQ Chamber of Commerce, provided expert feedback on the language and phrasing of the questions used in the survey. Further, three focus groups were included in the initial testing phase, with 60 participants belonging to equity-deserving groups. Participants tested a large pool of questions for the testing phase, provided opinions on the questions, and added relevant questions not addressed in the survey.

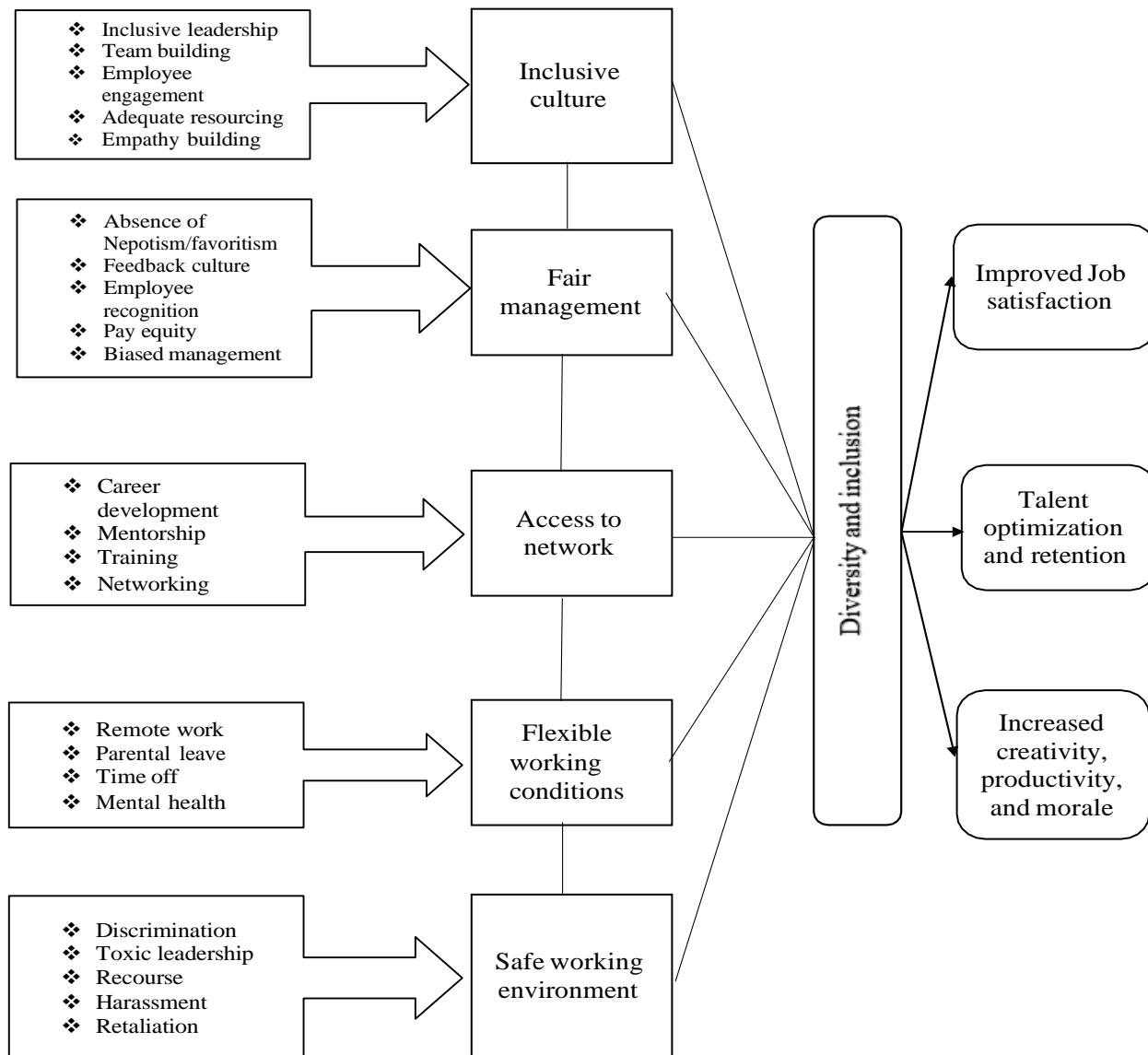


Figure 1. Framework for the DDIS illustrating the five core themes and sub-themes

Following contributions from the focus group, the authors condensed the survey to 17 questions with significant changes made to eight questions. After the initial testing phase, the survey underwent a pilot testing phase involving a diverse sample of working adults from 25 companies in Canada, the U.S., and the United Kingdom.

Instrument

The current version of the Diversio Diversity and Inclusion Survey (DDIS) consists of three sections: the Likert-based questions and free-text questions assessing experience (i.e., inclusion), the demographic and identity questions assessing diversity, and the logistical questions identifying employee roles, levels, departments, and regions of work. The first section captures the five themes reflecting inclusivity in the workplace (inclusive culture, fair management, access to networks, safe working environment, and flexible working conditions). This section consists of five questions representing each theme (see table 2), measured using a five-point Likert scale with options ranging from “No, not at all” to “Yes, definitely”. In addition, this section offered a free text prompt (what would the organisation do better

to support inclusion and belonging at work?) to provide respondents with the opportunity to supplement the Likert-based questions and add more context to the quantitative data. In the second section, the survey collects relevant demographic data (e.g., race/ethnicity, gender, sexual orientation, role, and disability) of participating individuals from each organisation. Finally, the third section obtains information on employees' roles and status in the organisation.

Interpretation of the DDIS involves establishing the dominant versus non-dominant group and scoring using the responses to the five Likert-based questions (the summated scores can range from 0 to 25). Typically, especially in North America, the dominant group consists of persons with the demographic traits (usually white, heterosexual, and non-disabled males) appearing most frequently at the executive level of an organisation. Thus, the leadership team determines the dominant group and is company-specific. The non-dominant group comprises everyone who does not belong to the dominant demographic; hence, they actively seek inclusion in the organisation. Survey responses from the DDIS are stratified according to the group employees fall under (dominant versus non-dominant). More weight is ascribed to the non-dominant group's perception (score on the DDIS) of the D&I at the workplace.

Study population

The reported data was part of an extensive cross-sectional survey of workers from different organisations spread across the following countries: Argentina, Australia, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, Chile, China, Colombia, Ecuador, Egypt, France, Germany, India, Indonesia, Ireland, Japan, Kazakhstan, Lebanon, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Russia, Singapore, South Africa, Spain, Sweden, Turkey, Ukraine, United Arab Emirates, United Kingdom, U.S., and Uzbekistan. Participants were contacted by email and encouraged to participate in the anonymous DDIS survey. Particularly, importance was placed on recruiting a diverse and representative sample; hence, a deliberate recruitment effort targeted non-dominant groups. Between January and December 2019, 11,027 respondents in different professional roles spread amongst 18 organisations participated in the anonymous survey.

Statistical analyses

Responses from the DDIS were retrieved and stored on Microsoft Excel, and statistical analyses were completed using SPSS statistical software for Windows (version 25, IBM SPSS, 2017). For descriptive purposes, means and standard deviations (S.D.) were calculated for continuous variables, while frequency (n) and percentages were determined for categorical variables.

The first section of the survey, which consisted of five questions scored on a Likert scale, investigated their psychometric properties. The psychometric properties represent the measurement tool's reliability, usefulness, and appropriateness in the context it is being used (Portney & Watkins, 2009). For our analysis, we investigated the reliability, which is the internal consistency of the DDIS.

The internal consistency reliability determines how well a survey accurately measures the investigated concept(s). Investigators calculate the Cronbach alpha to test the internal consistency of a survey or questionnaire (Streiner & Kottner, 2014). The Cronbach's alpha coefficient reflects the level of covariance between the items on the survey. Hence, a higher alpha coefficient (0.0 to 1.0) represents a more consistent scale and a greater chance that the questions genuinely reflect the investigated concept (Souza et al., 2017). Commonly, alpha coefficients above 0.7 are considered ideal, while values between 0.60 and 0.70 are satisfactory, and values under 0.50 are poor (Souza et al., 2017).

Results

In summary, out of 11,027 survey respondents, 2,227 were excluded because of missing data; thus, the final sample for this study consisted of 8,800 respondents working in organisations spread across the globe. Most respondents resided in North America and Europe; however, many responses came from India

and South Africa. Most survey respondents identified as men (47%), white (51%), and heterosexual (78%). Regarding organisation roles, most respondents were general employees (43%), followed by managers (21%) and executives (7%). Eighteen percent of respondents identified as disabled, and amongst them, mental and physical impairments were the most reported disabilities. Table 1 provides the main characteristics of the sample.

Table 1. Demographic characteristics of the survey respondents ($n = 8800$)

Gender	n (%)
Female	4048 (46)
Male	4136 (47)
Other	264 (3)
Prefer not to answer	352 (5)
Ethnicity	
Asian	1672 (19)
Black	616 (7)
Latin/Hispanic	176 (2)
Middle Eastern	176 (2)
Mixed race	352 (4)
White	4488 (51)
Other	440 (5)
Prefer not to answer	880 (10)
Sexual orientation	
Asexual	352 (4)
Bisexual	176 (2)
Gay	88 (1)
Heterosexual	6864 (78)
Other	176 (2)
Prefer not to answer	1144 (13)
Disability	
Yes	1584 (18)
No	6424 (73)
Prefer not to answer	792 (9)
Role	
Associate/support/entry-level/staff	3784 (43)
Management	2464 (28)
Prefer not to answer	2552 (29)

The summed score for the DDIS had a mean value of 18.09 and a standard deviation of 5.68 (95% confidence interval: 17.97,18.21). For the internal consistency of the DDIS, the Cronbach's Alpha for the survey was 0.840, with all item-total correlations greater than 0.5. Table 2 provides five questions scored on the Likert scale (the first section of the DDIS representing the five core themes) and summarises the item-total correlations and Cronbach alpha change after item deletion.

Table 2. DDIS first section questions and summary of the internal consistency for the DDIS (n = 8800)

Questions	Content	Mean score (S.D.)	Item-total correlation	Cronbach's alpha if item deleted
1. Do you feel your team values your opinion?	Inclusive culture	3.70 (1.35)	.691	.796
2. Do you receive fair and objective feedback from your manager on your performance?	Fair management	3.55 (1.42)	.743	.780
3. Is there someone in a position of influence at your company who is invested in your growth and development? (for example, your manager)	Access to network	3.19 (1.55)	.648	.807
4. Do you have the flexibility and support you need to manage personal care obligations? (for example, childcare, elder-care, or personal commitments)	Flexible work conditions	3.78 (1.47)	.642	.808
5. In your experience, is COMPANY free from discrimination and harassment?	Safe work environment	3.86 (1.47)	.510	.844

Discussion

Over the past few decades, diversity and inclusion practices in the workplace have gained prominence, leading to increased research in this field to highlight and elucidate systemic factors and relevant frameworks (Boekhorst, 2015; Kaur & Arora, 2020). Organisations use specific metrics, such as recruitment practices to measure the success of their D&I policies/culture. Further, there is growing consensus regarding the need for validated tools with solid theoretical frameworks that adequately capture perceptions of inclusivity at every level of an organisation (Fernandez-Archilla et al., 2020; Roberson, 2006). Hence, this work aimed to elucidate the conceptual framework used to build the DDIS and investigate its internal consistency.

The DDIS was built on five core themes: inclusive culture, fair management, access to networks, flexible working conditions, and a safe working environment. These themes have strong theoretical corroboration and are valuable indicators of the state of D&I culture at any organisation, as evidenced in previous studies (Adams et al., 2020; Kelliher & Anderson, 2010; Konrad, 2006; Kossek et al., 2017; Shore et al., 2011; Tan, 2019). Further, these core themes have also been used to design surveys used in other empirical studies investigating D&I in the workplace (Mor-barak & Cherin, 1998; Person et al., 2015).

The reliability of the DDIS as a valid measure of D&I metrics was investigated using data from a cross-sectional study of employees of different ethnicities, nationalities, and professions. Based on the findings on the internal consistency of the DDIS, items from the first section (the five Likert-based questions) showed good reliability with a Cronbach's alpha of 0.84. The study findings indicate a relatively low

random error and a high internal consistency observed with the DDIS. Ergo, the DDIS, by virtue of its high reliability, provides a reliable instrument to determine the degree of employee perception of the culture of inclusivity, management's fairness, network access, the flexibility of working conditions, and safety of the working environment at any given organisation.

The strength of the DDIS as a measure for D&I also lies in the scale development process. The methodology (i.e., scale development including conceptual underpinnings and testing of psychometric properties) employed by the creators followed standard scale development procedures and is similar to that observed in studies of this nature (Souza et al., 2017). The final version of the DDIS, which we used to test its reliability, was a product of rigorous testing and input from qualified stakeholders on item development, refinement, and removal based on a framework relevant to D&I at the workplace.

The DDIS may also be beneficial in its application to a broad range of industries or professions. This is because the DDIS lacks an industry-specific design typically seen with similar assessment instruments; for example, tools designed to appraise D&I in academia like the Index of Inclusion Questionnaire (Fernandez-Archilla et al., 2020). In addition, the DDIS was tested across different industries, offering evidence of its versatility. Hence, the DDIS instrument has good utility since it can be applied to any audience or group of users. Data generated is dependable irrespective of industry, including academia, healthcare, or businesses.

Finally, the DDIS capacity to assess demographic representation and employee perceived inclusivity within an organisation is significant. Often, D&I assessments, especially for research purposes, mainly capture demographic factors (e.g., the number of women or individuals living with a disability, as a measure of diversity and inclusion) (Thompson, 2017). However, such emphasis on demographic factors is restrictive because it may offer an imprecise assessment of D&I that may not fully capture the representation and engagement of non-dominant groups within an organisation. The DDIS overcomes this limitation by capturing both demographic and inclusion metrics.

Although the present study's findings provide confidence in the utility of the DDIS, there should be more testing of its psychometric properties. For example, the psychometric evaluation of the DDIS to check for reproducibility (test-related reliability), which is the consistency of the survey to yield the same result on repeated trials in similar conditions. A follow-up study with the same participants will help achieve this. Further, a limitation with all self-report measures is the potential for response bias. However, the DDIS helps overcome this limitation by adding the free-text prompt accompanying the Likert-based questions that allow the users to provide context for their choice of answers if they wish to.

Conclusion

Diversity and inclusion in the workplace are vital as they provide immense benefits at the individual and organisational levels. To that end, organisations have incorporated practices and policies that boost institutional capacity for diversity and inclusion. Forefront among such efforts is the development of reliable instruments to determine the level of engagement and culture of inclusion within an organisation.

Experts and stakeholders such as Diversio, Workday, Culture Amp, Qualtrix, and Peakon, have significantly contributed to creating diagnostic and benchmark tools to evaluate D&I metrics. One such standout instrument is the DDIS by Diversio, which was the focus of our study. To the best of our knowledge, the DDIS is the only valid diversity and inclusion instrument tested across a broad group of participants spanning different ethnicities, countries, and professions.

As our findings have shown, the DDIS reliably gathers feedback on questions representing thoroughly researched and evidence-based constructs of diversity and inclusion. In addition, the high internal consistency observed with the DDIS signifies good reliability. So, as a diagnostic tool, it can accurately

capture D&I metrics and generate relevant data that may identify and address areas needing improvement or monitor key performance indicators of ongoing D&I programs. Further, the DDIS provides reliable data for hypothesis generation and research inquiry within the D&I research field in the research context. Finally, data generated from the DDIS may be used as a reliable yardstick by different users, including researchers, administrators, and business owners, to gauge their endeavours towards inclusion.

Overall, the DDIS instrument represents a significant step in the right direction towards developing and growing the diversity and inclusion culture.

Endnotes

¹ The Cronbach's alpha coefficient reflects the level of covariance between the items on the survey; Hence, a higher alpha coefficient (0.0 to 1.0) represents a more consistent scale and a greater chance that the questions genuinely reflect the investigated concept (Souza et al., 2017)

Acknowledgments

We would like to express gratitude to Laura McGee (founder & CEO, Diversio) and Anya Klimbovskaia (chief operating officer, Diversio) for granting the study team access to their organisation's data. Lastly, we would like to thank the University of Waterloo, Diversio, and Mitacs Accelerate (primary funder, Project IT18980) for their support of our work.

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