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Research Article

How Do Team Diversity Act to Exercise Effect on Team Performance: Looking through the Lens of Cultural Intelligence among Employees

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This study investigates the relationship between team diversity and team performance. In addition, the mediating influence of cultural intelligence in this relationship is also investigated. By focusing on 20 selected care homes in the healthcare sector of the United Kingdom, 346 employees were drawn from 84 work teams to participate in the study. Through the self-administered, structured, and close-ended survey questionnaire, research data were elicited from these respondents. From the descriptive analysis and simple mediation analysis conducted, while it was discovered that team members have an above-average level of observable and non-observable diverse characteristics, team diversity also has a positive relationship with the performance outcomes of work teams. In addition, the positive relationship between team diversity and team performance was found to be partially mediated by cultural intelligence. Thus, in light of these findings, recommendations were made for organizations particularly those in the healthcare sector to deploy more resources aimed at facilitating a more diversified workforce and also strive to make provision for those training programs in addition to human resource policies that promote employee cultural intelligence.

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1. Introduction

The COVID-19 pandemic has subjected the United Kingdom healthcare delivery services to various types of negative eventualities which could be vividly seen in the form of successive waves of infections, devastating death tolls, in addition to various indirect impacts in the form of a decreased

use of, and disruption to health care for unrelated conditions such as cancer, mental health conditions and various forms of undiagnosed conditions (Baum & Schwartz, 2020). For instance, the excess deaths that have been reported in the United Kingdom from January 2021 to date have been shown to be higher than in most Western and Eastern countries while the UK, alongside, Spain, Italy, Belgium, and the United States have been reported to collectively constitute the countries where the highest drop in life expectancy have been recorded during this period, (Moynihan, et al, 2021). Furthermore, it has been revealed by Shah et al (2022) that the UK Comparably recorded higher COVID-19 infections and admissions than many European countries just as the statistics on health on other healthcare outcomes pre- and post-pandemic periods show that the UK fares comparatively poorly in terms of obesity, mortality from heart disease, mental health, cancer, and infant mortality. This is even more so as the UK has been shown to be having a relatively poor rating in terms of doctors, nurses, diagnostic equipment, to healthcare and bedding facilities for older people.

With respect to the UK care homes (whose basic function is to make provision for accommodation, provide nursing aid and personal care for people suffering from health-related challenges such as mental illness, conventional illness, or are disabled, infirm, alcoholic or drug addiction, as well as the provision of immediate response to health-related crises), the ability for efficient and effective service delivery on a long and sustainable term to these sets of patients have continued to be a formidable challenge (Prince, Wu, & Guo, 2015); as these patients are usually forced to contend with inappropriate management of long term conditions and gross inequality in terms of having access to hospital care that is even far below what is made available to community-dwelling older adults (Gage, Dickinson, & Victor, 2012).

Based on the survey by Care Quality Commission in 2009, it has been revealed by Carter (2012) that 57 percent of residents in the UK care home sector were marginalized and unable to access the required healthcare services; while the existing services in most UK care homes have been described as a betrayal and fundamental right infringement of older people which is against the acceptable norm in any civilized society (British Geriatrics Society, 2011). Thus, as the global healthcare system is striving to cope with pandemic-related demands, in addition to the backlog of unmet care and needs that have accrued over the years, it is imperative for the United Kingdom not just to make up for the years of un-investment in its healthcare sector but also to go an extra mile in achieving a committed and high-performance workforce most especially in the care home sector, with the view of achieving a world-

class status, and also to be more prepared for future exigencies (Selman, Khan, Draz, Iqbal & Aslam, 2016; Shah, et al., 2022).

Meanwhile, as the present days form of globalization and borderless situation requires companies including those in the healthcare sectors to internationalize their operations and make use of work teams, consisting of individuals with differing national origin, and having different characteristics and cultural background (Au & Marks, 2012); and as studies (eg; National Institute for Health and Care Research, 2022; Goodman et al, 2016) have clearly shown that the performance of healthcare sector does not just require an increased payment or improved training for employees but also on the quality of the relational structure or nature of working relationship among the different set of employees, it is particularly important to investigate the importance of team diversity on team performance and also to find out the underlying process that may either act to facilitate or inhibit this process most especially within the global healthcare delivery sector where high work performance outcome is urgently needed for a positive turnaround. Arising from these, the present research is focused on determining the effect of team diversity on team performance. In addition, it also seeks to find out if cultural intelligence would act as a mediator in this relationship.

There are lots of studies in the past few decades that have been primarily focused on how team diversity act to exercise an effect on team performance (Obsuwan et al., 2021; Stahl & Maznevski, 2021). Thus, while some have revealed a small positive relationship (see; Earley & Mosakowski, 2000; (Horwitz & Horwitz, 2007), others (e.g; Kirkman, Tesluk, & Rosen, 2004; Jehn & Mannix, 2001), have provided evidence of a negative and small relationship while some meta-analysis have even found no overall relationship (see; Bowers et al., 2000; Webber & Donahue, 2001). This unexpected result has led to the emergence of two schools of thought which borders on the notion that team heterogeneity poses a double edge sword on performance outcome in the sense that (1) it can produce friction and conflict and hence an obstacle to team performance outcome and (2) as a source of synergy and learning to achieve a profitable team outcome (Obsuwan et al., 2021; Stahl & Maznevski, 2021). Meanwhile, an overall consensus that predominates among these two schools is that there is a need for a clear exploration of the mechanisms and contingencies underlying this relationship as these factors have remained under-explored and poorly understood among team diversity researchers (Moog & Soost, 2020). This is even more so, as the meta-analytical evidence in Stahl and Maznevski's (2009) study, involving 10,632 work groups provided evidence that the relationship between team diversity and team performance is far from being direct but subjected to the influence of a mediating

process being carried out by certain variables. Hence, this has prompted some researchers to devote their attention to the underlying process or mediating variable through which this effect is exercised on team performance (Jones et al., 2020; Lu et al., 2018).

In particular, while studies (e.g: Jones et al., 2020; Meck & Johanning, 2013; Milliken & Martins 1996) have uncovered that team diversity impacts negatively on performance through team conflict, trust consensus, social integration, communication in-effectiveness, it has however been revealed by some other studies that team diversity can impact positively to generate improved performance through team member creativity (see; Bouncken, 2004; Bouncken & Winkler, 2010; Bouncken et al., 2016). Thus, even though these strands of research lend clear support to the mediating influence of these variables, there seems to be a lack of sufficient evidence presently concerning the role of cultural intelligence as an intervening variable in that research in this area remains scarce (Darvishmotevalia, Altinayb, & De-Vita), irrespective of the fact that this type of intelligence has been described by Ang and Van Dyne (2008) as an important determinant of the extent to which individuals make use of their capability and know how to achieve an adaptation between their interactions and people of diverse background and culture, with the view of achieving a profitable outcome.

All in all, with 13.8 percent of the workforce of the UK healthcare sector constituted by minority immigrants who have no British identity, and the projection to recruit 5000 nurses per year from overseas starting from 2020 (NHS Staff Survey, 2020) research that concentrates on this sector with a particular focus on care homes to examine the relationship between team diversity and team performance in addition to the mediating influence of cultural intelligence in this relationship would not just aid in contributing to enriching the existing literature in this area but would also aid in deepening understanding on the underlying mechanisms that lends support to this relationship. Thus, by being of the few studies that make use of the information processing/learning theory as against most previous studies that make use of the Social Categorization Theory and Similarity Attraction Theory to examine this relationship, this study makes a significant contribution.

Contextually, it also makes a contribution by being one of the few studies to the knowledge of this researcher that will focus on the Care home as an appendage of the UK health sector by considering this important research model. Besides, since current diversity management practices and research focuses more on diversity management practices in the organization and on preventing the negative effect that can emanate from the diverse workforce with little focus on the knowledge required to take advantage of the performance benefits that may be derived from diversity (see; van Knippenberg,

Nishii, & Dwertmann, 2020), this current study also makes a notable contribution. In the second section of the paper, a review of existing literature relevant to the main concepts in the research topic and a theoretical foundation that supports the highlighted conceptual framework was presented. The third section focused on the research methodology while the fourth section presents the analysis of data according to the objectives of the study. Lastly, section five focuses on discussion and conclusions on major findings, in addition to the relevant implications of these findings.

2. Theoretical Background and Hypotheses Development

2.1. Theoretical Background (The Information Processing Theory)

As against other theories such as the similarity attraction (see; Williams & O'Reilly, 1998) which assumes that people prefer to work with teams that have shared beliefs and the same perspectives, a lack of which is assumed to lead to intergroup bias, stereotypes, and consequently negative outcomes such as lack of trust, communication and impaired team performance, and the information categorization theories (e.g., van Knippenberg et al., 2004) where any type of team diversity is assumed to be a breeding ground for a within team social categorization, which tend to impede negatively on critical processes such as information processing, communication, and conflicts management all of which tend to exercise effect on team performance (Lu et al., 2018), the Information Processing Theory (see; Atkinson & Shiffrin, 1968; Baddeley & Hitch, 1974) is founded based on the idea that the information received by humans are processed and used as a basis of responding to future environmental stimuli rather than merely responding passively to these stimuli. It is of the view that human beings are what they are due to how they were raised, in what type of environment they were raised in, and their early childhood experiences. This thus implies that members of teams with diverse backgrounds are more likely to become culturally intelligent due to an opportunity to learn from their immediate environmental stimuli in the form of a wide array and broader pool of information that is made available through such a diverse team environment.

Thus, within the framework of this study, it is assumed that (1) diverse work team members are likely to be in possession of a broader pool of information due to the direct and constant interaction and multi-perspective learning activities that exist among diverse team members (see; Van Veelen & Ufkes, 2017) and (2) this pool of information is assumed to lead to improved learning and creative adaptation among team members and the ability to work comfortably and effectively in the team

(cultural intelligence) (Caligiuri et al., 2011) thereby leading to superior output in terms of the collective and individual team members task outcomes (team performance).

2.2. Team Performance

According to Salcinovic, Drew, Dijkstra, Waddington, and Serpell (2022) a team is a group of people who have delineated roles and responsibilities, characterized by adaptive interaction, and inter-dependence, are dynamically striving to achieve a valued common outcome; and are embedded in an organizational system, characterized by boundaries and linkages to the broader system context and task environment (Salas, Sims, & Burk, 2005).

According to Batarseh et al. (2017), team performance has been described as the output from both the collective process and individual tasks. In the opinion of Salas, Goodwin, and Burke (2009) it is the capacity of a team for achieving goals and objectives thereby culminating in better team members' outcomes. Hence, this means that the causes of team failure not only reside in member inability but also in "their collective failure to coordinate and synchronize their individual contributions" (Zaccaro, Rittman & Marks, 2001). Thus, while team performance sometimes comprises the overall outputs, attributed to the team's actions regardless of how the performance outcome was achieved (Salas, Sims, and Burk, 2005), Kozlowski and Bell (2012) describe the effectiveness of a team as encompassing the degree to which team members interacts to achieve desired output; which means that a within team higher performance outcome may be achieved if organizations focused on creating a teamwork environment that fosters effective interrelation, synergy, in addition to the cordial working relationship among the team members.

According to Entin and Serfat (1999) teams that have access to the mechanisms of teamwork, facilitative leadership, and supportive team behavior, in addition to better communication are likely to achieve superior performance. This is even more so as Malcolm and Scott (2011) declared that issues such as organizational climate, professional conflict, power and influence, and employment insecurity continue to pose significant challenges to the achievement of critical objectives in organizational team settings. Hence, this seems to suggest that leadership inadequacy and improper guidance may be responsible for most of the performance failure in teams as effective leadership, most especially in highly dynamic teams is expected to establish, define and communicate team goals, in addition to outlining the structure that is required for the accomplishment of the goals (Gadirajurrett, Srinivasan, Stevens, & Jeena, 2018).

2.3. Team Diversity

Based on the opinion of van Knippenberg, Nishii, and Dwertmann (2020) diversity refers to a characteristic of a social unit and the extent that the individuals in such unit differ on an attribute of interest which may tend to exist in the form of demographic features, job-related characteristics, personality traits or attitude and cultural values. Arising from this conceptualization, Moog and Soost (2020, p 23) highlighted the concept by describing it as "the differences in terms of age, nationality, cultural and religious background, functional background or task skills, sexual orientation, and political preferences, among others, that is exhibited among team members". Accordingly, two levels of cultural diversity have been identified by Stahl et al. (2009). In this regard, the surface level of diversity has been highlighted as those that determine the varieties of people such as age, gender, ethnicity, and nationalities (Harrison et al., 2002) while the deep level of diversity has been described to exist in the form of personalities, attitudes, culture, and values (Jackson and Ruderman, 1995).

This is even more so as Horwitz and Horwitz (2007) provided an identification of two classes of diversification based on existing team literature: bio-demographic diversity and task-related diversity. In the opinion of these researchers, the former refers to the innate member characteristics that are immediately observable and can be categorized as age, gender, and race/ethnicity while the latter form of diversity can be described as acquired individual attributes such as functional expertise, education, and organizational tenure. Meanwhile, due to the fact that cultural diversity often operates at the subconscious level and as differences in culture are often classified as a source of categorization and stereotyping (Mannix and Neale, 2005), the effect of this form of diversity has been described by Stahl and Maznevski (2020) as likely to be stronger than other diversity sources. Nevertheless, while a wide range of these attributes has been studied by organizational researchers, most of these studies and their theoretical and managerial implications have been focused on demographic diversity in the form of gender, race, culture and to a lesser extent, age (van-Dijk, van-Engen, & van-Knippenberg, 2012); which provides a mirror to the extent in which organizations are intensifying the effort to address gender, race, and ethnic imbalance (Dobbin & Kalev, 2016); and the strong and rising interest in teams being made up of members with diverse competencies, and having cross-functional competencies (Mathieu, Hollenbeck, Van Knippenberg & IIgen, 2017).

2.4. Cultural Intelligence

Cultural intelligence has been described by Ang and Van Dyne (2008) as the ability of an individual to act effectively in a diverse cultural environment due to the combination of people characterized by differences on various dimensions such as race, culture, value, gender, age, etc. According to Caligiuri et al. (2011, p36), "It refers to individuals' ability and skill to work in multicultural settings quickly, comfortably, and effectively". Based on this suggestion, Darvishmotevalia, Altinay, and De-Vitac (2018) declared that cultural intelligence is unique in the sense that it describes individuals' cultural ability in addition to the knowledge of adapting their interactions with people of other cultures. Meanwhile, such abilities go beyond simply being intelligent, being emotionally mature, or in possession of good general social skills but also encompasses four interactive components which has been identified by Ang and Van Dyne (2008) as (1) the cognitive cultural intelligence whose focus is on the extent to which existing knowledge of norms, behaviors, and customs in different cultures are easily adapted to by individuals, (2) the meta-cognitive cultural intelligence which refers to the capability of an individual to process a piece of information during and after a culturally diverse experience, (3) the motivational cultural intelligence, which is determined by the drive and willingness of an individual to seek out and participate in intercultural experiences and be highly disposable in learning more about cultural diversities, and (4) the behavioral cultural intelligence which has to do with the ability to participate in multi-cultural inclined suitable verbal and nonverbal actions. Hence arising from these interactive components, Livermore (2015) has described culturally intelligent individuals as those who have skills within cultural quotient drive (interest, adaptability to multicultural situations), cultural quotient knowledge (understanding both differences and similarities among cultures), cultural quotient strategy (being aware and having the ability to plan for multicultural interactions) and cultural quotient action (the ability for adaptation in terms of work-centred relations in multicultural settings).

2.5. Team Diversity and Team Performance

Two schools of thought exist pertaining to the association between team diversity and organizational outcomes. First, those that are of the opinion that diverse teams make use of their complementary knowledge, skills, abilities, and perspectives to generate different ideas and new approaches to improve the quality of decisions which tends to impact positively performance outcomes (see; Horwitz & Horwitz 2007); and those who contend that the more homogenous a team is, the less

tendency there would be an irreconcilable view that can lead to inefficient communication, dysfunctional team interaction, and impaired consensus and trust (Carter & Phillips); which are important factors that have been highlighted for attaining improved performance outcome among work teams (Obsuwan, Chandrashekar, Kraus, Brem, & Bouncken, 2021).

From the perspective of those who see diversity as a positive antecedent to team outcome, Stahl et al (2009) believe that diversity helps team members to achieve more creativity and innovative outcomes in that it affords team members access to knowledge from members with different backgrounds. Also, Van-Veelen & Ufkes (2017) contended that through diversity, team members are imbibed with a broader pool of information and the ability to learn skills, knowledge, and ideas from different perspectives; which engender greater creativity, more innovation, and better decision making (van Knippenberg, Nishii, & Dwertmann, 2020). Thus, the more diverse a team is, the more likely it is that its members will bring diverse information, insights, and perspectives to the team to achieve superior creativity and performance outcomes (Stahl & Maznevski, 2021). Based on the declaration by Hambrick, Cho, and Chen (1996) due to the unique cognitive attributes that team members bring to the team, team outputs tend to be characterized by more creativity, innovation and problem-solving approaches which tend to result in an increase in performance outcomes at both individual and team level. This is even more so as Somech (2006) suggest that having participative leaders who solicit and seriously consider diverse insight can promote team member ability for information integration to achieve an innovative outcome.

Thus in this regard, the assertion by Rock and Grant (2016), based on a report by McKinsey in 2015 declared that companies that are most grounded in ethnic and racial diversity are 35 percent more likely to achieve superior financial returns, while others who exhibit superiority in gender diversity are more likely to achieve an above industry average in financial returns. Furthermore, from the research by Troster et al. (2014) among sixty (60) nationalities, a direct and significant link was established between an enhancement of team-level performance and a centralized structure created by diverse teams, while the effect is stronger among teams and network that are more culturally diverse. Also, in the meta-analysis conducted by Horwitz and Horwitz (2007), support was uncovered for the positive impact of task-related diversity but not for bio-demographic diversity. From their research on 131 spinoffs in the German and Swiss biotechnology sector, it was revealed that, though a significant positive effect exists for team diversity on team performance, this relationship was however mediated by networks and financial resources. Conversely, Huynh et al. (2017) uncovered

that a diverse mix of capabilities among founding members of University spin-offs impacts positively their performance while the result provided by Visintin and Pittino (2014) among 103 Italian University spin-offs clearly showed that teams comprising both academic and non-academic members tend to foster performance outcomes of sales and employment growth but only when they are from the same field, University, or are of smaller team size.

Contrastingly, those schools of thought that see diversity as an obstacle and challenge are of the opinion that similarities between people make it easier to bond, trust, and collaborate, while differences in this regard are likely to culminate in stereotypic belief which can lead to a preference for associating with team members that share similarity over dissimilar all of which can disallow a proper functioning at the team level, through a reduction in collaboration and communication. Based on the submission by Jones et al. (2020) as the diversity level of a team increases challenges for smooth workflow are created one of which is conflict; which is the result of differences between team members (Obsuwan et al. 2021). Thus, from the submission of De Jong et al. (2020), it can be deduced that regardless of the nature of any form of diversity, this tends to manifest in categorization within teams and then pose challenges to lots of downstream processes and activities that may either be in form of information processing, or communication processes. Also, it has been contended that differences in team members lead to the formation of an out-group, leading to inter-group bias and stereotype negative evaluation of and reactions toward out-group members (Mannix & Neale, 2005; Van Veelen and Ufkes, 2017). Thus, members who tend to have a perception of similarity will feel superior to those in the out-group (Bouncken & Barwinski, 2020) thereby culminating in impaired communication, trust, knowledge sharing, and coordination among members (Carton & Cummings, 2012).

From the empirical environment, Urionabarrenetxea, Fernandez-Sainz, and García-Merino (2021) uncovered that a direct and positive influence is exerted by team diversity, on relationship conflict in such a way that teams which are more diverse in terms of surface-level diversity and deep level diversity are significantly more prone to relationship conflict which then, tend to hamper performance outcome. Also, similar results have been uncovered for this relationship by other studies (e.g., Jehn et al., 1999; Leonard et al., 2004; Jehn et al., 1997, Meckl and Johanning, 2013). This is even more so as the recent study by Obsuwan et al. (2021) clearly shows that while team diversity impact positively on team-based conflict, the effect of this type of diversity was shown to be insignificant for communication effectiveness, social integration, and team performance. From the above-mixed

findings, it is vivid that team diversity constitutes a double edge sword whose effects varies effects based on a variety of contexts and in the presence of several intermediate and mediating variables (Obsuwan et al. 2021; Stahl1 & Maznevski, 2021); whose knowledge seems to be presently limited among a host of diversity scholars (van-Knippenberg, Nishii, & Dwertmann, 2020).

2.6.1. Cultural Intelligence as a Mediator

Concerning the potential mediating influence that cultural intelligence may exert on the relationship between team diversity and team performance, van-Knippenberg, Nishii, and Dwert (2020) declared that those employees with a high level of cultural intelligence are equipped with the ability to reduce division, and eliminate knowledge gaps among their peers by educating them about different cultures; to enhance intergroup knowledge transfer; to build interpersonal connections and smoothening the interpersonal processes in a multicultural workforce. Thus, by alluding to this proposition, Nishii, Khattab, Shemla, and Paluch (2018) noted that culturally intelligent employees also possess the potential for enhancement of innovation and creativity as a consequence of their ability to integrate diverse resources, and also render businesses with the knowledge on how to make the best use of the diverse orientation that characterized a multicultural workforce. According to Darvishmotevalia, Altinay, and De-Vitac (2018), since the assumption lies in the fact that employees well versed in cultural intelligence are in possession of the ability to integrate diverse resources and multiple perspectives, it is likely that this would propel them in driving up innovations and creativity aimed at enhancing favourable organizational outcome. This is even more so as Trifilova and Stamm (2012) declared that this form of intelligence has the potential of impacting negatively on the social categorization process of diverse teams which will in turn trigger a creative performance outcome among them.

Furthermore, cultural intelligence has been highlighted by Alon and Higgins (2005) as a key element of successful interactions in international markets, a success factor for leadership effectiveness (Rockstuhl et al., 2011), cultural adaptation (Lee and Sukoco, 2010), and innovation (Elenkov and Manev, 2009). In this regard, a plethora of research (e.g; Thomas, Liao, Aycan, Cerdin, Pekerti, & Ravlin, 2015; Szkudlarek, Romani, Caprar, & Osland, 2020) has provided clear evidence that improved cultural intelligence acts to impact positively on effective communication, conflict management, trust building, and other processes and emergent states that mediate high team multicultural performance. Thus from the empirical study by Ng, Van Dyne, and Ang (2019), it was shown that team members

who are well-versed in cultural intelligence tend to voice disagreement on consensus and provide new business information all of which impact positively on creativity and performance outcomes while yet another by Presbitero (2020) revealed that a direct and linear relationship exists between cultural intelligence and individual task performance in global virtual teams most especially when there is an increase in contact with the team leader.

With respect to the relationship between team diversity and cultural intelligence, it had been made known by the submission from Caligiuri (2015) that individual members of a diverse team are likely to develop diverse competencies along the different areas of each team member's diversity. In the same vein, Urionabarrenetxea, Fern´andez-Sainz, and García-Merino (2021) lamented that the higher the diversity of a team, the more there is team member interaction as a result of the different viewpoints, ideas, and opinions. Hence, such interaction and debate on different perspectives/approaches will allow members to learn and become well-grounded in a multidimensional knowledge base, which tends to enable them to properly define the situation and thus identify the best strategies for problem-solving (van-Knippenberg & Schippers, 2007). Based on this assumption, Ishkakova and Ott (2020) noted that the development of culture at the team level takes place over time, thereby surpassing a threshold to impact positively on team performance.

Empirically, while team communication and cohesion were found to be key to collaborative work within teams to enhance team performance (Butchibabu, Sparano-Huiban, Sonenberg, & Shah, 2016; Pinto & Lourenço, 2014); the outcome of the research by Bunderson and Sutcliffe (2002) alluded to the fact that the achievement of such feat is contingent on the nature of team composition in that compared to teams with fewer diversities, teams with varying level of functional diversities (operations, logistics, leadership) are found to be significantly more superior in terms of cohesion, and information sharing which consequently lead to a performance increase. More recently, from the study by Jones et al. (2020) it was uncovered that the dynamism and cross-cultural competence exhibited by team members play an important role in determining the performance of the overall team. Based on these suppositions, it is expected in this study that employees who share membership of teams characterized by a high level of diversity in terms of gender, age, cultural values, and occupational skills would tend to have access to varieties of ideas, opinions, values, orientations, and problem-solving techniques due to their constant and continual interaction with diversified team members. similarly, it is also contented such knowledge would, in turn, tend to improve their ability and skills to understand, interact and work with other team members both effectively, efficiently, and

quickly, which would, in turn, lead to less tension, less team conflict, more synergy, and cooperative behaviour thereby leading to faster work process and enhancement in performance outcome. In sum from the foregoing, the following hypotheses are proposed.

I. There is a significant positive relationship between team diversity and cultural intelligence

II. There is a significant positive relationship between team diversity and team performance

III. There is a significant positive relationship between cultural intelligence and team performance

IV. The relationship between team diversity if any, is mediated by cultural intelligence
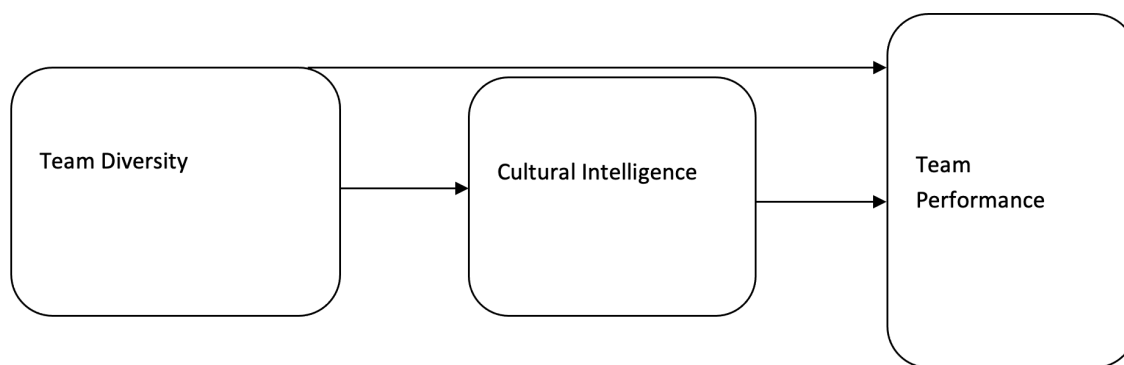
2.7. Conceptual Framework

Figure 1. Conceptual Framework showing the direct Relationship Between Team Diversity and Team Performance in Addition to the Mediating Influence of Cultural Intelligence

Source: From literature review

3. Methods/Materials

3.1. Research Design/Procedure

The quantitative research design, in addition to a descriptive survey method, using a close-ended, structured, multiple-choice questionnaire was utilized to collect numerical data from work teams that are selected from 20 care homes in Birmingham City, with the view of facilitating the collection of uniform and standardized data and thus, increase the credibility and validity of the study findings in line with other researches guided by positivism philosophy. First, we sent letters to the management of the selected care homes to explain our research goals and obtain permission. In response, all the 20

care homes eventually agreed to take part in the research. We also visited team leaders in these organizations to learn more about their teams so as to be able to choose the most suitable teams and employees to participate in the survey as well as to discuss survey schedules. After ensuring that the employee who constitutes the selected teams have worked together for at least 6 months, and have better knowledge and understanding of other team members, and had no form of prior diversity training, they were approached in their main offices, during work hours and provided with the participant information sheet, and given the opportunity to ask questions. Those who are willing to participate in the study were given a questionnaire to complete an envelope in which to return it to the researcher once completed.

Consent was implied when a participant read the information and then proceed to complete it. This allows potential participants to take decisions on voluntary participation and eliminate any potential influence that may emanate as a result of the researcher. Following the laid down procedure by Tsui et al. (1997), we used the aggregation of the perception of every team member method to calculate the overall scores of each team including their leaders, based on the popularity of this method in the academic literature (Li, Jia, Cai, Kwan and You, 2020). Hence, aggregated scores in each team were treated as a representation of the score for that team. By default, we include team leader rating because team leaders have sufficient knowledge of entire teams through everyday observations and interactions with team members, and due to the fact that external observation is an unobtrusive way to measure collective constructs (Stajkovic, Lee, and Nyberg (2009).

3.2. Participants/Sampling Techniques

The population of this study is the residential care homes in Birmingham City. As of August 8, 2022, the total number of these care home based on information from the website of care homes in the United Kingdom (carehome.co.uk) which list all residential care homes registered in Birmingham city, with the relevant regulatory body, is 197. Based on this number, a total of 20 care homes were randomly selected by following recommendations from Zikmund (2005) on sample size selection criteria. Furthermore, a total of 84 work teams, which comprised 346 team members and team leaders were finally selected from these homes as the participants of the study. On average, 4.11 members, in a team with a range of 4 members to 6 members participated in the survey. Of the 346 copies of the questionnaire that were given out to the members of these work teams, only 344 copies were returned, while 1 copy was found to be badly filled and incomplete thereby rendering it unusable. From the 343

copies that were utilized for the final analysis, 169 or 49.4 percent are male while 174 or 50.6 percent are female which tends to suggest a fair representation of these two gender groups.

With regard to the age group of the respondents, a total of 59.5 or 17.3 percent are between the ages of 18 and 25 years, 161 or 46.9 percent have their age range between 26 and 35 years, 102 or 29.6 percent have an age range of 36 to 45 years while 21 or 6.2 percent were found to be above 46 years old. Furthermore, a total of 47 or 13.6 percent were found to be high school certificate holders, 233 or 67.9 percent were also found to be first degree holders, while 52 or 18.5 percent are holders of various forms of postgraduate qualifications. Lastly, based on the fact that occupational status could also exercise an effect on the magnitude and direction of the relationship between team diversity and team performance, the respondents were also classified on the basis of occupational status. From the analysis, 34 or 9.9 percent were found to be junior staff, 148 or 43.2 were found to be middle-level staff, 136 or 39.5 percent indicated they are senior staff, while a total of 25 or 7.4 percent admitted to the fact that they are management staff.

3.3. Measures

This study employed the use of a multiple-choice structured questionnaire that is designed for the purpose of collecting the primary data that are considered crucial for the success of the study based on suggestions by Awang (2008) that it allows for data to be collected within a short period of time. The items that make up the questionnaire are presented below.

3.3.1. Team Diversity

For team diversity, the heterogeneity scale developed by Campion, Medsker and Higgs (1993) which focuses on the perceived team diversity among team members in terms of cultures, values, language, age and gender was adopted. From a previous study among the employees of a large financial services company in the United States of America, a Cronbach alpha internal consistency value of 0.70 was obtained by Campion, Papper and Medsker (1996). Sample items on this scale include "my team consist of individuals who hold different cultural background, cultural values, and behavior", "the members of my team vary widely in their area of expertise" etc.

3.3.2. Team Performance

Team performance was measured by seven (7) items scale adopted by Barrick et al. (1998), and Heilman et al. (1992. These items measure (1) quantity of work, (2) quality of work, (3) work planning and allocation, (4) knowledge of tasks, and (5) overall performance. From a previous study on team performance, a Cronbach alpha internal consistency value of 0.80 was obtained for the items. Here, team members were presented with the following statements "How you would rate the work output in your work team in terms of the following criteria: "quantity of work", "quality of work", "work planning and allocation", "knowledge of job tasks". All these were answered on a 5-point Likert scale ranging from below average to above average. Concerning the supervisors, they were presented with questions such as "The quantity of work in this team is commendable, the quality of work in this team is in line with the acceptable standard, with a Likert scale that ranges from strongly disagree to strongly agree.

3.3.3. Cultural Intelligence

For cultural intelligence, the nine (9) item scale developed by Ang and Van Dyne (2008) was adopted. From a previous study by Darvishmotevalia, Altinayb, and De Vitac (2018), a composite reliability value of 0.984 was obtained for these items. Here, the type of questions that were asked from team members ranged from "My team have the knowledge required in interacting with individuals from different cultures and religions", to "In my team, we can easily adapt our cultural information when interacting with individuals from unfamiliar cultures", "My team have information regarding the legal and systems of people from other countries". For the supervisors, sample items include "this team have the knowledge required in interacting with individuals from different cultures and religions", the members of this team have the capacity to adapt their cultural information when interacting with individuals from unfamiliar cultures" etc.

3.3.4. Control Variables

Due to the fact that the teams in the study are nested within organizations, it was considered imperative to ensure that responses from the teams in each organization are not interdependent due to certain factors that are unique to each organizations but can boast of a significant level of independence. Thus in this regard, the teams were included as control variable. Also, care homes were included as control variable to ascertain that team responses serve as a reflection

All items on numerical scale were presented on a five-point Likert scale which allows respondents to express their level of agreement and disagreement.

3.4. Data Analysis

We employed both descriptive and inferential statistics to analyze the research data. Descriptive analysis was employed in the processing of the demographic profiles of respondents. In order to assess the relationship between team diversity and team performance in addition to the mediating influence of cultural intelligence, inferential statistics were employed. Specifically, the three-model analysis was carried out by making use of the Process Macro script with 5000 bootstrap estimates as recommended by Hayes (2013).

4. Analysis/Results

We performed confirmatory factor analysis on our major variables by running the hypothesized measurement model of the 3-factor, 2-factor, and 1-factor models. Table 1 shows that the hypothesized 3-factor model has the best fit: (x^2 = 140.501, df = 132, x^2/df = 1.064, RMSEA = 0.028, TLI = 0.933 CFI = 0.942, IFI = 0.949. Also, as it is necessary to ensure that common method variance is not an issue with the study, we subjected the dataset to the Herman Single factor analysis. The result showed that the variance extracted by the first un-rotated factor is 15.3 percent which is considerably less than the 50 percent threshold recommended by Williams and Cote and Buckley (1989) thereby indicating that common method bias is not a problematic issue with the dataset. With respect to the reliability and internal consistency of the items, we obtained a Cronbach alpha value of.620,.669, and.604 for team diversity, cultural intelligence, and team performance respectively. Accordingly since an item of cronbach alpha score of 0.6 and above has been considered reliable and acceptable (Sekaran, 2008), the items in this study can thus be considered to have satisfied the assumption of reliability.

Model	χ^2	df	χ^2/df	RMSEA	TLI	CFI	IFI
3 Factor Model	140.501	132	1.064	.028	.933	.942	.949
2 Factor Model	175.785	134	1.312	.062	.675	.715	.748
1 factor Model	210.755	135	1.561	.084	.414	.483	.540

Table 1. Fit Indices of Variables

4.5. Hypotheses Testing

As stated earlier, Pearson's product-moment correlation analysis was utilized to determine the nature of the association among the variables. In addition, Process macro (see Hayes, 2013) was employed with a bias-corrected confidence interval of 5,000 bootstrap samples in determining the direct and indirect relationship between team diversity and team performance. The Process macro was utilized as a result of its flexibility as well as the ability to provide tests of statistical inference of the actual indirect effect, as against the "3-step" approach put forward by Baron and Kenny (1986) in their seminal paper as this approach is now recognized as problematic on multiple grounds (see; Hayes, 2013). Table 2 shows the coefficient of correlation between variables, the mean, and the standard deviation of the variables. Accordingly, there is a positive and significant correlation between team performance and cultural intelligence r =.443, p = 0.000 (p < 0.01). Also, team performance is positively associated with team diversity at the 0.01 significant level r =.427, p = 0.000 (p < 0.01) while team diversity is also positively and significantly associated with cultural intelligence r =.577, p = 0.000 (p < 0.01). These results mean that those care workers who perceive higher levels of diversity within their team also tend to exhibit a higher level of cultural intelligence and a higher level of perceived team performance.

		M	SD	1	2	3
1	TP	2.79	7.5	1		
	N			84		
2	CI	3	5.7	.443**	1	
	N			84	84	
3	TD	3.6	3.1	.427**	.577**	1
	N			84	84	

Table 2. Mean Standard Deviation and Bivariate Correlation of Variables

**. Correlation is significant at the 0.01 level (2-tailed).

Models	Beta	SE	T	Sig
Step 1 (outcome Variable= Cultural Intelligence)				
Constant	9.6985	2.4784	3.9132	.0002
Care homes	1.0802	.7217	1.4967	.1387
Teams	-.7665	.5600	-1.3688	.1751
Team Diversity	.5800	.1013	5.7226	.0000
(R^2.3871)	(F 9.4745)	(Sig.000)		
Step 2 (Outcome Variable = Team performance)				
Constant	10.4004	3.1272	3.3258	.0014
Care homes	-1.6999	.8422	-2.0185	.0472
Teams	-.0301	.6519	-.0462	.9633
Team Diversity	.3096	.1397	2.2163	.0297
Culture	.3465	.1328	2.6095	.0110
(R^2.2969)	(F 5.2068)	(Sig.0002)		
Step 3 (Outcome Variable = task performance)				
Constant	13.7606	2.9581	4.6519	.0000
Care homes	-1.3257	.8614	-1.5389	.1280
Teams	-.2957	.6684	-.4424	.6595
Team Diversity	.5105	.1210	4.2204	.0001
(R^2.2322)	(F 4.5351)	(Sig.0011)		

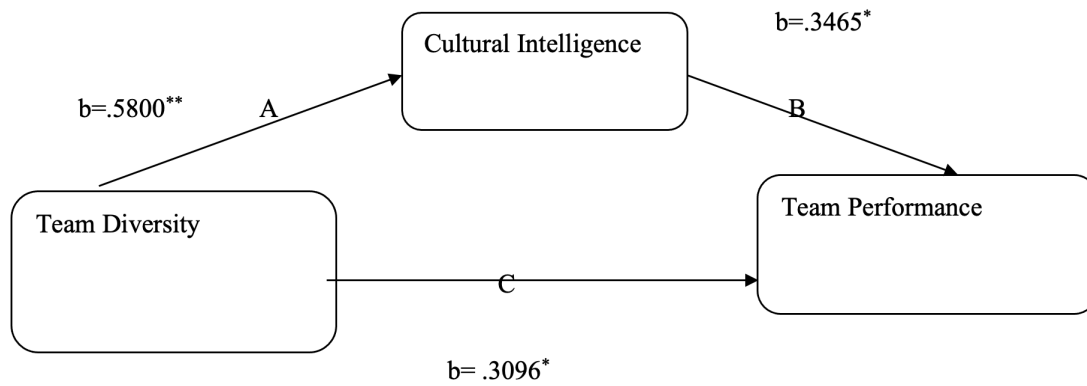**Table 3.** Direct, Total and Indirect Effect of Team Diversity on Team Performance

Figure 2. Path diagram of the mediation model of cultural intelligence as an intervening variable between team diversity and team performance.

Effect	Boot SE	Boot-LLCI	Boot-ULCI
.2009	.0864	.0397	.3821

Table 4. Indirect Effect of Team Diversity on Team Performance

The output from the mediation analysis is presented in Table 3 above. the first step of the analysis, the regression of the independent variable, team diversity on mediating variable cultural intelligence was significant, b=.5800, p=.000 (p<.01) while controlling for the different care homes and teams. This leads to the acceptance of hypothesis 1 which predicted that a significant positive relationship exists between team diversity and cultural intelligence.

In the second step, which focuses on the direct effect of both team diversity and cultural intelligence, team performance was treated as the outcome variable and it was shown, after also controlling for the four demographic variables that while team diversity has a positive and direct relationship with team performance b=.3096, p=.0297 (p<.05) and thus provides support for hypothesis 2 that a significant and positive relationship exists between team diversity and team performance, the mediating variable, cultural intelligence equally has a positive and significant direct relationship with team performance b=.3465, p=.0110 (p<.05) which also lead to the acceptance of hypothesis 3. In the third

step of the analysis, the total effect of team diversity on team performance through cultural intelligence was examined. Also, the analysis showed a positive and significant impact on team performance with a beta value that is greater than the direct effect that is individually exercised by team diversity, b=.5105, p=.0001 (p<0.01); while the a & b path coefficients displayed in Figure 2 are both statistically significant and pointing in the same direction. Using a bias-corrected bootstrapping with 5,000 re-samples, it can be observed in Table 4 where the indirect effect of team diversity on team performance is shown that the beta value for this effect is.2009 with a 95 percent interval.0397 to.3821. Hence, since the 95 percent confidence interval does not include 0, it can be concluded that the indirect effect is statistically significant meaning there is partial mediation taking place. Hence, this leads us to the acceptance of hypothesis 4 which predicted that the relationship between team diversity would be mediated by cultural intelligence.

5. Discussion of Findings

With an urgent need for the global healthcare system to cope with the incidence of COVID-19 and also meet up the backlog of unmet care and needs that have accrued, it is imperative for stakeholders in the global healthcare sector to go the extra mile in achieving a committed and high-performance workforce most especially in the highly marginalized United Kingdom care home sector (see; Shah, et al., 2022); with the view of taking on various future exigencies and also meeting up with the millennium development goals. Thus, as net international migration continues to be the primary source of population growth in most industrialized countries, further adding to workforce diversity (United States Census Bureau, 2018, March 13); this calls for the development of a framework on how to gain the performance benefits that diversity can afford with the view of improving overall organizational outcomes (van Knippenberg, Nishii, & Dwertmann, 2020). This research extends the Information Processing Theory (see; Atkinson and Shiffrin, 1968; Baddeley and Hitch, 1974) to present a research model that proposes a direct relationship between team diversity and team performance and also highlights cultural intelligence as an important part of the underlying process that governs this relationship. In view of this, four research hypotheses were presented.

With respect to the first hypothesis, results from the analysis confirmed a direct and significant positive relationship between team diversity and cultural intelligence thereby obtaining support for this hypothesis. Thus, while this result consolidates on the empirical findings by Butchibabu, Sparano-Huiban, Sonenberg, and Shah (2016); Pinto and Lourenço (2014), it also provides support for

the information processing theory (see; Atkinson & Shiffrin, 1968; Baddeley & Hitch, 1974) which argued that members of teams characterized by diverse background tend to be more attuned to cultural intelligence due to an opportunity to learn from their immediate environmental stimuli, which may exist in the form of a wide array of information, skills, and knowledge. Thus, in consonance with this line of reasoning, the submission by Jia et al., (2014) pointed out that when the diversity quality of team composition is properly managed, this tends to play a crucial role in shaping social relationships among different social agents, and then act to facilitate those cross-learning activities that exert influence on their attitudes, behaviors, and orientation. This is even more so as van Knippenberg, Nishii, and Dwertmann, (2020) declared that while synergistic outcome act as one of the positive influences of diversity management, the process that usually facilitates such outcomes includes the integration of diverse information and perspectives by team members.

Furthermore, we also found support for hypothesis 2 that a significant and positive relationship exists between cultural intelligence and team performance and that the mediating variable, cultural intelligence equally exercises the same positive and significant direct effect which also leads to the acceptance of hypothesis 3. In a nutshell, these two important findings seem to lend absolute support to previous research (see; Obsuwan, Chandrashekar, Kraus, Brem, and Bouncken, 2021; Huynh et al.2017; Visintin and Pittino 2014; van-Knippenberg, Nishii, and Dwert, 2020; Szkudlarek, Romani, Caprar, and Osland, 2020) where theoretical arguments and empirical shreds of evidence were evidentially utilized. Thus, when organizations placed a premium on developing employee's ability and skill to work in multicultural settings quickly, comfortably, and effectively in addition to developmental programs for them to adapt their interactions with people of varying levels of diversity, such gestures could act as a panacea in any situation where it is necessary to overcome the challenges that usually manifests as a result of this diversities.

Lastly, we also find out that the effect of cultural intelligence on team performance is not independent, but that team diversity acts on cultural intelligence which in turn triggers an improvement in performance outcome thereby producing a partial mediation. In sum, this finding also reinforces the information /decision-making framework where the integration of different perspectives of team members was highlighted as a condition for desirable team performance (Urionabarrenetxea, Fern´andez-Sainz, & García-Merino, 2021); and the achievement of such feat is highlighted as being contingent upon the ability of team members to engage in effective interaction and cooperation (Lovelace et al., 2001) (cultural intelligence).

Thus, when diverse team members spend years working together, the large chunk of experience and familiarity gained through these years improved their willingness to share knowledge and information (Moreland et al., 1996). Hence, this gives them the opportunity to deliberate on different perspectives and approaches, and also to make the right diagnosis of the situation thereby identifying the best task strategies to be carried out with the view of fostering improved outcomes. Although, at the initial stage of team formation, Horwitz and Horwitz (2007) have identified many irreconcilable differences among heterogeneous members which tend to lead to dysfunctional team interaction and suboptimal performance. However, this type of hostility and differences can be overcome with time if team members are given the privilege to express their selves regardless of their background, and tend to create a learning environment that facilitates mutual understanding and respect for contradictory views and opinions (van-Knippenberg, Nishii, & Dwertmann, 2020); which seems to be that both time and patience are inevitable tools that must be devised by team managers to achieve a profitable outcome in any team settings.

6. Limitations/Future Research Directions

First, due to the cross-sectional nature of this research, this infers that no causality can be drawn with regard to the nature of the relationship uncovered among the variables. In addition, since time and longevity have both been identified as important factors to be considered when trying to identify the precise estimate of team diversity on team performance (Horwitz & Horwitz, 2007), a fruitful area for future researchers may be to make use of longitudinal approach or teamwork observation over time in their investigation. This is in the view that such a research design would enable one to draw a causal inference on this relationship and also give a chance for decisions to be taken on the dynamism associated with this effect and the particular time that team diversity would translate to the type of experience needed to foster cultural intelligence, team member familiarity, knowledge sharing and improved productivity.

Second, even though, we make use of statistical analysis to ascertain that common method bias was not an issue in the self-reported dataset employed in this study, meanwhile, as self-reported measures have been reported to be prone to several types of bias and elements of motivated self-enhancement (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Richter, Tavfelin, & Sverke, 2018); we however still encourage future researchers to make use of more objective measures such as patient

evaluation, supervisor rating, team member rating as a better measure of individual team member performance outcome.

Third, as factors such as leadership, organizational policies, and team size can interact with diversity management practices to shape outcomes (van Knippenberg, Nishii, & Dwertmann, 2020); it is suggested that prospective future researchers should replicate the research model in this study by focusing on other care homes with different types of leadership and organizational policies so as to control for the potential effect that may have been exercised by these variables. For instance, since the average team size across teams in this study is 4.11, research that makes use of larger or smaller team sizes would give more insight into the effect of team size in this type of research model.

Lastly, due to the influence, that personality attributes may play in the extent to which members in a diverse team exhibit a varying level of outcomes (Halfhill, Sundstrom, Lahner, Calderone, & Nielsen, 2005); we encourage future researchers to take strive in determining the influence of these attributes in the research model proposed in this study.

7. Implications of Findings

the findings in this study provides a reinforcement to the information processing theory (see; Atkinson & Shiffrin, 1968; Baddeley & Hitch, 1974) which argued that team diversity provides team members with the platform that facilitates cross-learning of wide arrays of diverse information and practices, all of which tend to culminate in the ability to act effectively, efficiently and productively in a diverse cultural environment comprising of people of different races, culture, gender and age. Hence, while these results have assisted in deepening understanding on the underlying mechanism in the relationship between team diversity and team performance, it has also encapsulate the role that may be played by cultural intelligence in facilitating a superior level of performance in a team characterized by high level of diversity. By so doing, it has provided an answer to the call by Darvishmotevalia, Altinayb, & De-Vita, 2018) on the need for prospective researchers to provide a succor to the scarce literature on the mediating role of cultural intelligence in a diverse team, in dire need of superior and competitiveness.

Practically, contrary to the widely held assumption in diversity literature that team diversity often leads to unique challenges in the form of inter/intra group conflict, tension, and unfavorable stereotyping all of which results in suboptimal team performance outcome, the results in this study have shown that this form of diversity if properly and methodically managed can indeed produce a

spin-off of profitable and optimal team level performance outcome. Thus, in this regard, managers are enlightened that it is not just enough to create a multi-perspective and diverse work team and also to provide an environment in which employees can function well regardless of their backgrounds but more importantly, is the need to create an environment that stimulates the free flow in communication, exchange and use of divergent views and ideas. In this regard, organizations should strive to offer employees diversity training in addition to training on adaptation to changing conditions with the view of limiting misunderstanding, lack of trust, conflict, and intergroup bias among team members as this would tend to facilitate a breeding ground through which productive and profitable learning can be achieved to promote both individual and team performance outcomes. Other supporting strategies could be in the form of allowing team members to become aware of the great importance and necessity associated with making use of diverse approaches in carrying out crucial job tasks, and guiding them through the process of eliciting and considering diverse ideas and extracting the best combinations of suggestions.

Second, as team member cultural intelligence has been uncovered to be quite important in the underlying process that facilitates healthy team performance in a diverse team environment, managers would thus benefit more from this optimization by focusing on improving team member cultural intelligence whenever the objective is making use of team diversity to achieve improvement in team performance. This type of intelligence may be inculcated in employees either through formal training programs, other capacity-building activities, hiring broad-minded people, or by allowing them to make use of time and experience to learn, achieve familiarity and become adapted to diverse knowledge and opinions from other team members.

Lastly, since the success of any diversity practices depends on how these practices are actually implemented and how employees experience the implemented practices, managers would benefit more from these practices if they strive to serve as role models by seeking and considering the ideas of others, and also let it be known to team members that pursuing diverse perspectives on a task is important, that such action would serve as a guide for teams in eliciting, considering, and extracting the best combinations of diverse ideas and suggestions.

8. Conclusion

This study examined the impact of team diversity on team performance and the mediating influence of cultural intelligence among employees of selected care homes in Birmingham City, United

Kingdom. The study finds out that team diversity indeed impacts positively team performance in that performance outcome seems to be higher when there is higher perceived member diversity among team members. This finding indicates that those organizations who have work teams that consist of members with differing levels of both surface level and internal diversities: culture, gender, age, education, skills, and language are more likely to be more competitive in terms of performance outcome than those whose employees are more uniform in these attributes. Contrary to the widely held assumptions by the Social Categorization Theory and Similarity Attraction Theory that team diversity impacts negatively performance through team conflict, communication ineffectiveness, intergroup bias, stereotypes, and lack of trust, this research has proven that a positive aspect exists for this relationship exists if organizations are willing to deploy a veritable management strategy to reap from these benefits.

Furthermore, the study also finds out that the relationship between team diversity and team performance is mediated by cultural intelligence in the sense that cultural intelligence positively impacts to enhance the strength of this relationship which means that organizations may derive an optimal outcome from this relationship by focusing on improving the cultural intelligence attributes of their employees.

Data Availability

The datasets analyzed and generated during the current study are available from the corresponding author at reasonable request.

Ethical Statement

In accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards, approval of this study and the data collection instrument was obtained from the ethical committee of the Department of International Business/Human Resource Management, Birmingham City University, United Kingdom. In addition, the management of the care home under focus was informed of the nature of the study and was made to grant their permission before the administration of the questionnaire.

Consent to participate

Before making them participate in the study, informed consent was acquired from all the employees in the study and it was brought to their awareness that they are free to withdraw from the study at any time as it may be deemed fit, and that there would be no financial or any other form of compensation for participation.

Appendix 1

SECTION A

PLEASE READ THE FOLLOWING CONSENT QUESTIONS AND TICK THE BOXES IF YOU ARE WILLING TO COMPLETE THIS QUESTIONNAIRE.

☐ I confirm that I have read and understand the participant information sheet for the above-mentioned study. I was given the opportunity to consider the information and asked questions which has been answered satisfactorily.

☐ I certify that the nature and purpose, potential benefits, and possible risks associated with

participating in this research have been explained to me.

☐ I accept that my taking part in this study is voluntary and the time required to complete the

questionnaire has been explained to me.

☐ I speak English.

☐By completing this questionnaire, I consent to taking part in this study.

NOW PLEASE COMPLETE THE QUESTIONNAIRE

Section A (Demographic Information)

Please tick as appropriate the box that you consider most appropriate among the following demographic information.

Gender

(a) Male [   ] (b) Female [   ]

Educational Qualification

(a) Senior School Certificate [   ]   (b) Ordinary Diploma [   ]   (c) Higher Diploma [   ]

(d) First Degree [   ] (e) Post Graduate Qualification [   ]

Occupational Status

(a) Junior Staff [   ]   (b) Middle Level Staff [   ] (c) Senior Staff [   ]

(d) Management Staff [   ]

Age

(a) 18-28 years [   ]   (b) 29-38 years [   ] (c) 39-48 years [   ]

(d) 49 years above [   ]

SECTION B

Please tick (√) how you would rate the work output in your work team in terms of the following criteria. (Team Performance).

Below Average
1

Somewhat below Average
2

About Average
3

Somewhat above average
4

Above Average
5

No	Items	1	2	3	4	5
1	The quantity of work in my team					
2	The quality of work in my team					
3	The work planning and allocation in my team					
4	The knowledge of tasks in my team					
5	The work effectiveness of my team members					
6	The overall work output of my team.					

SECTION C

Please tick (√) the number that represents your degree of agreement or disagreement regarding the following statements (cultural intelligence).

Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5

No	Items	1	2	3	4	5
1	I have the knowledge required in interacting with individuals from different cultures and religion					
2	I adapt my cultural information when interacting with individuals from unfamiliar culture.					
3	I have information regarding legal and systems of people from other countries.					
4	I know some of my team member language' rules (i.e. vocabulary, grammar).					
5	I like interacting with individuals from different age groups					
6	I am certain that I have the ability to deal with the stress of Adapting to demands from team members from different gender group					
7	I can change my verbal behavior (e.g. accent, tone) when interacting with team members from different cultures.					
8	I can change my non-verbal behavior when interacting with customers from different cultures.					

SECTION D

Please tick (√) the number that represents your degree of agreement or disagreement regarding your work team (team diversity)

Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5

No	Items	1	2	3	4	5
1	My team consist of individuals who hold different cultural background, cultural values, and behavior					
2	The members of my team vary widely in their area of expertise					
3	The members of my team have skills and abilities that complements each other					
4	My team consists of individuals with differing age grade					
5	My team consists of individuals from different gender groups					

References

- Alon, I. & Higgins, J.M. (2005). Global leadership success through emotional and cultural intelligences. *Bus. Horiz.* 48 (6), 501–512.

- Ang, S., &Van Dyne, L., (2008). *Handbook of Cultural Intelligence*: Theory, Measurement, and Applications. M. E. Sharpe, Armonk, NY.

- Au, Y & Marks, A. (2012). Virtual teams are literally and metaphorically invisible: Forging identity in culturally diverse virtual teams. *Employee Relations,* 19 (43), pp. 17-46.

- Awang, M.G. (2008). *An Introduction to Research Methodology for Social Sciences.* 978-967-5080-00-5, 25000.study skills- Education (higher) 2. College Student Orientation 371.30280711.

- Barron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology,* 51, 1173-1182.

- Baum A, & Schwartz, M.D. (2020). Admissions to Veterans Affairs hospitals for emergency conditions during the COVID-19 pandemic. *JAMA, 324:96–9.doi:10.1001/jama.2020.9972 pmid: http://www.ncbi.nlm.nih.gov/pubmed/32501493*

- Bouncken, R & Barwinski, R. (2020). Shared digital identity and rich knowledge ties in global 3D printing: A drizzle in the clouds? *Global Strategy Journal.* 10.1002/gsj.1370.

- Bouncken, R., Brem, A. & Kraus, S. (2016). Multi-cultural teams as sources for creativity and innovation: The role of cultural diversity on team performance. *International Journal of Innovation Management,* 20, 1650012.

- Bouncken, R & Winkler, V. (2010). National and cultural diversity in transnational innovation teams. *Technology Analysis & Strategic Management*, 1 (22), PP. 133–151.

- Bouncken, R (2004) Cultural diversity in entrepreneurial teams: Findings of new ventures in Germany. *Creativity and Innovation Management*, 13: 240–253.

- Bunderson, J.S. & Sutcliffe, K.M. (2002). Comparing alternative conceptualizations of functional diversity in management teams: process and performance effects. *Acad Manag J.* 45(5):875–93.

- Butchibabu A., Sparano-Huiban C., Sonenberg L., & Shah J. (2016). Implicit coordination strategies for effective team communication. *Hum Factors*, 58(4), 595–610.

- Caligiuri, P., Noe, R., Nolan, R., Ryan, A., & Drasgow, F. (2011). Training, developing, and assessing cross-cultural competence in military personnel. United States Army Research Institute for the Behavioral and Social Sciences, Arlington, Virginia.

- Campion, M.A., Papper, E.M., & Medsker, G.J. (1996). Relations between work team characteristics and effectiveness: A replication and extension. *Personnel Psychology*, 49: 437.

- Carter, A. B., & Phillips, W. P. (2017). the double-edged sword of diversity: Toward a dual pathway model. *Social and Personality Psychology Compass, 11*(5), 1–13. https://doi.org/10.1111/spc3.12313.

- Carton, A & J Cummings (2012). A theory of subgroups in work teams. *Academy of Management Review*, 37, 441–470.

- Darvishmotevalia, M., Altinayb, L., & De-Vitac, G. (2018). Emotional intelligence and creative performance: Looking through the lens of environmental uncertainty and cultural intelligence. *International Journal of Hospitality Management,* 73: 44–54.

- De-Jong, B, N., Gillespie, I. W., & Gill, C. (2020). Trust consensus within culturally diverse teams: A multi-study investigation. *Journal of Management*, 0149206320943658.

- DiStefano, JJ & ML Maznevski (2000). Creating value with diverse teams in global management. *Organizational Dynamics*, 29(1), 45–63.

- Dobbin, F., & Kalev, A. (2016, July/ August). Why diversity programs fail. *Harvard Business Review*. Retrieved from https://hbr.org/2016/07/ why-diversity-programs-fail.

- Elenkov, D.S. & Manev, I.M. (2009). Senior expatriate leadership's effects on innovation and the role of cultural intelligence? *J. World Bus.* 44 (4), 357–369.

- Entin, E.E. & Serfaty, D. (1999) Adaptive team coordination. Hum Factors. 41(2), 312–25.

- Fadis. Batarseh and Usher, J.M. (2017) Collaboration capability in virtual teams: examining the - influence on diversity and innovation. *International Journal of Innovation Management* 21: 6. DOI: 10.1142/S1363919617500347.

- Gadirajurrett, H., Srinivasan, R., Stevens, J., & Jeena, N. (2018) Impact of leadership on team performance. Engineering and Technology Management Student Projects. 1912. https://pdxscholar.library.pdx.edu/etm_studentprojects/1912.

- Halfhill, T., Sundstrom, E., Lahner, J., Calderone, W., & Nielsen, T. M. (2005). Group personality composition and group effectiveness: An integrative review of empirical research. *Small Group Research*, 36: 83-105.

- Hambrick, D., Cho, T., & Chen, M. (1996). The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41(4), 659–684.

- Harrison, D, K., Price, J. G., & Florey, A. (2002). Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal*, 45(5), 1029–1045.

- Hayes, A., F. (2013) *Introduction to mediation, moderation, and conditional process analyses; A regression-based approach.* New York, NY: The Guilford Press.

- Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management*, 33(6): 987–996.

- Iskhakova, M. & Ott, D.L. (2020). Working in culturally diverse teams: Team-level cultural intelligence (CQ) development and team performance. *Journal of International Education in Business,* 13(1), 37–54.

- Jackson, S.E. & Ruderman, M.N. (1995). Introduction: Perspectives for understanding diverse work teams. *In diversity in work teams: Research paradigms for a changing workplace*, SE Jackson and MN Ruderman (Eds.), pp. 1–13. American Psychological Association.

- Jehn, K, G Northcraft & M Neale (1999) Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly,* 44(4), 741–763.

- Jehn, K, C C., & Thatcher, S. (1997) To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management*, 8(4), 287–305.

- Jia, L., Shaw, J. D., Tsui, A. S., & Park, T. Y. (2014). A social-structural perspective on employee-organization relationships and team creativity. *Acad. Manag. J.* 57, 869–891. doi: 10.5465/amj.2011.0147.

- Jones, G, BC Chace & J Wright (2020). Cultural diversity drives innovation: Empowering teams for success. *International Journal of Innovation Science*, 12(3), 323–343.

- Joshi, A & H Roh (2009). The role of context in work team diversity research: A meta-analytic review. *Academy of Management Journal*, 52(3), 599–627.

- Kozlowski, S. W, & Bell, B.S. (2012). Work groups and teams in organizations. In: Weiner I, Schmitt NW, Highhouse S, editors. Handbook of psychology, vol. 12. 2nd ed. Hoboken: Wiley.

- Lee, L.Y., & Sukoco, B.M. (2010). The effects of cultural intelligence on expatriate performance: the moderating effects of international experience? *Int. J. Hum. Resource Manage.* 21 (7), 963–981.

- Leonard, J, D Levine & A Joshi (2004). Do birds of a feather shop together? The effects on performance of employees' similarity with one another and with customers. *Journal of Organizational Behavior,* 25(6), 731–754.

- Li J, Jia L, Cai Y, Kwan, H.K. and You, S. (2020) Employee–organization relationships and team performance: role of team collective efficacy. *Front. Psychol.* 11:206. doi: 10.3389/fpsyg.2020.00206.

- Livermore, D. A. (2015). *Leading with cultural intelligence: the real secret to success. American Management Association.* https://books.google.ro/books?id=JYbQrQEACAAJ.

- Lovelace, K., Shapiro, D. L., & Weingart, L. R. (2001). Maximizing cross-functional new product teams' innovativeness and constraint adherence: A conflict communications perspective. *Academy of Management Journal*, 44: 779-793.

- Lu, L, F Li, K., Leung, Savani, K., & Morris, M.W. (2018). When can culturally diverse teams be more creative? The role of leaders' benevolent paternalism. *Journal of Organizational Behavior*, 39(4), 402–415.

- Mannix, E & Neale, M. (2005). What differences make a difference?. *Psychological Science in the Public Interest*, 6(2), 31–55.

- Meck, R & Johanning, M. (2013). Leading multicultural teams in the PR China. *American Journal of Industrial and Business Management,* 3(1), 49–63.

- Malcolm D, & Scott, A. (2011). Professional relations in sport healthcare: workplace responses to organizational change. *Soc Sci Med.* 72(4), 513–20.

- Mathieu, J. E., Hollenbeck, J. R., van Knippenberg, D., & Ilgen, D. R. (2017). A century of work groups in the *Journal of Applied Psychology. Journal of Applied Psychology,* 102, 452–467.

- Milliken, F & Martins, L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review,* 21(2), 402–433.

- Moog, P & Soost, C. (2020). Does team diversity really matter? The connection between networks, access to financial resources, and performance in the context of university spin-offs. *Small Bus Econ,* https://doi.org/10.1007/s11187-020-00412-1.

- Moreland, R. L., & Myaskovsky, L. (2000). Exploring the performance benefits of group training: Transactive memory or improved communication? *Organizational Behavior and Human Decision Processes*, 82: 117-133.

- Moynihan, R., Sanders, S., Michaleff, Z.A., Scott, A.M., Clark, J., Emma, J., Jones, M., Kitchener, E., Fox, M., Johansson, M., Lang, E., Duggan, A., Scott, I., & Albarqouni, L. (2021). Impact of COVID-19 pandemic on utilization of healthcare services: a systematic review, *BMJ Open,* doi: 10.1136/bmjopen-2020-045343.

- Nishii, L. H., Khattab, J., Shemla, M., & Paluch, R. (2018). A multi-level process model for understanding diversity practice effectiveness. *Academy of Management Annals*, 12, 37–82.

- National Institute for Health and Care Research (2022). Case study: Relational working key in delivering high-quality healthcare in care homes.

- NHS staff from overseas report (2020). https://commonslibrary.parliament.uk/research-briefings/cbp-7783/

- Ng, K.-Y., Van Dyne, L., & Ang, S. (2019). Speaking out and speaking up in multicultural settings: A two-study examination of cultural intelligence and voice behavior. *Organizational Behavior and Human Decision Processes*, 151: 150–159.

- Obsuwan, S., Chandrashekar, D., Kraus, S., Brem, A., & Bouncken, R. (2021). Does cultural diversity matter for team performance in multinational companies? an analysis of conflict, communication, social integration, creativity and satisfaction *International Journal of Innovation Management*, 25 (7), 21. DOI: 10.1142/S1363919621500821.

- Pinto, A.L. S. & Lourenço, P.R. (2014). The work team's internal functioning: bidimensionality, interdependence and performance. O Funcionamento Interno das Equipes de Trabalho: Bidimensionalidade, *Interdependênciae Performance,* 14(1):3–21.

- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podskoff, N.P. (2003).. Common method biases in behavioral research: A critical review of the literature and recommendations. *Journal of Applied Psychology*, 88 (5), 879 –903.

- Presbitero, A. (2020b). Task performance in global virtual team: Examining the roles of perceived cultural dissimilarity and cultural intelligence of member and leader. *Personnel Review*, 49(5), 1091–1105.

- Richter, A., Tavfelin, S., & Sverke, M. (2018). The mediated relationship of leadership on job insecurity. *Scandinavian Journal of Work and Organizational Psychology*, 3(1), 2, 1–14, DOI: https://doi.org/10.16993/sjwop.43.

- Rock, D. & Grant, H. (2016). Why diverse teams are smarter. *Harvard Business Review*, 4(4), 2–5

- Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L., & Annen, H. (2011). Beyond general intelligence (IQ) and emotional intelligence (EQ): the role of cultural intelligence (CQ) on cross-border leadership effectiveness in a globalized world. *J. Soc. Issues* 67 (4), 825–840.

- Salas, E., Goodwin, G. F., & Burke, C. S. (2009). *Team effectiveness in complex organizations: Cross-disciplinary perspectives and approaches.* New York, NY: Routledge. https://doi.org/10.4324/9780203889312.

- Salas, E., Sims, D.E., & Burke, C.S. (2005). Is there a "big five" in teamwork? *Small Group Res*, 36(5):555–99.

- Salcinovic, B., Drew, M., Dijkstra, P., Waddington, G., & Serpell, B.G. (2022). Factors influencing team performance: What can support teams in high-performance sport learn from other industries? A systematic scoping review. *Sports Med Open*, 8(1), 25.doi: 10.1186/s40798-021-00406-7.

- Salma, M., Khan, M.N., Draz, U., Iqbal, M.J., & Aslam, K. (2016). Impact of self-efficacy on employee's job performance in health sector of Pakistan. *American Journal of Business and Society*, 1 (3), 136-142.

- Sekaran, U. (2008). *Research Methods for Business*. New York, John Wiley and Sons.

- Shah, A., Brophy, S., Kennedy, J., Fisher, L., Walker, A., Mackenna, B., Curtis, H., Inglesby, P., Davy, S., Bacon, S., Goldacre, B., Agrawal, U., Moore, E., Simpson, C.R., Macleod, J., Cooksey, R., Sheikh, A., & Katikireddi, S.V. (2022). Impact of first UK COVID-19 lockdown on hospital admissions: Interrupted time series study of 32 million people. *EClinicalMedicine* https://doi.org/10.1016/j.

- Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of Management*, 32: 132-157.

- Stahl, G. & Maznevski, M.L. (2021). Unraveling the effects of cultural diversity in teams: A retrospective of research on multicultural work groups and an agenda for future research. *Journal of International Business Studies*, 52, 4–22

- Stahl, G, M., Maznevski, A. V. & Jonsen, K. (2009) Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41(4), 690–709.

- Stajkovic, A. D., Lee, D., and Nyberg, A. J. (2009). Collective efficacy, group potency, and group performance: meta-analyses of their relationships, and test of a mediation model. J. *Appl. Psychol.* 94, 814–828. doi: 10.1037/a0015659.

- Szkudlarek, B., Romani, L., Caprar, D. V., & Osland, J. S. (2020). The Sage handbook of contemporary cross-cultural management. London: Sage Publications Limited.

- Tadmor, C. T, P., Satterstrom, S. J. & Polzer, J.T. (2012). Beyond individual creativity: The super additive benefits of multicultural experience for collective creativity in culturally diverse teams. *Journal of Cross-Cultural Psychology*, 43(3), 384–392.

- Thomas, D. C., Liao, Y., Aycan, Z., Cerdin, J.-L., Pekerti, A. A., & Ravlin, E. C. (2015) Cultural intelligence: A theory-based, short form measure. *Journal of International Business Studies*, 46(9): 1099–1118.

- Trifilova, A. & Stamm, B. (2012). *The future of innovation.* London: Gower Publishing, Ltd

- Tröster, C, A M. & Van Knippenberg, D. (2014). Structuring for team success: The interactive effects of network structure and cultural diversity on team potency and performance. Organizational Behavior and Human Decision Processes, 124(2), 245–255.

- United States Census Bureau. (2018, March 13). Older people projected to outnumber children for the first time in U.S. history (Release No. CB18- 41) [Press release]. Retrieved from https://www.census.gov/newsroom/press-releases/2018/cb18-4population-projections.html

- Urionabarrenetxea, S., Fern´andez-Sainz, A., & García-Merino, J.D. (2021). Team diversity and performance in management students: Towards an integrated model. *The International Journal of Management Education*, https://doi.org/10.1016/j.ijme.2021.100478.

- Van Dijk, H., van Engen, M. L., & van Knippenberg, D. (2012). Defying conventional wisdom: A meta-analytical examination of the differences between demographic and job-related diversity relationships with performance. *Organizational Behavior and Human Decision Processes, 119*, 38–53.

- Van Knippenberg, D., Nishii, L. H., & Dwertmann, D. J. G. (2020). Synergy from diversity: Managing team diversity to enhance performance. *Behavioral Science & Policy, 6*(1), 75–92.

- Van-Knippenberg, D. & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology*, 58: 515–541.

- Van Veelen, R & E Ufkes (2017). Teaming up or down? A multisource study on the role of team identification and learning in the team diversity–performance link. *Group & Organization Management*, 44(1), 38–71.

- Visintin, F., & Pittino, D. (2014). Founding team composition and early performance of university-based spin-off companies. *Technovation, 34*(1), 31–43.

- Williams, L.J.; Cote, J.A.; & Buckley, M.R. (1989). Lack of method variance in self-reported affect and perceptions at work: Reality or artifact? *J. Appl. Psychol*, 74, 462–468.

- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *Leadership Quarterly*, 12, 451-483. http://dx.doi.org/10.1016/S1048-9843(01)00093-5.

Declarations