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Effect of Deep-Level Workforce Diversity on Group Cohesion: The Moderating Role of Team Leadership

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The purpose of this study is to examine the correlation between deep-level workforce diversity and social cohesion, with team leadership acting as a moderating variable. The functional theory of workplace diversity suggests that effective leadership and group cohesion helps organization leverage the benefits of diversity by ensuring that team members with diverse skills, experiences, and perspectives work together harmoniously towards a common goal, resulting in improved performance and innovation. The sample for this research consisted of 213 employees from public sector universities in Quetta, the capital of Balochistan. The data was collected through a self-administered structured questionnaire and analyzed using the Smart PLS software. The results show that deep-level diversity has a negative relationship with group cohesion, while team leadership has a positive relationship with group cohesion. Additionally, team leadership acts as a moderator in the model, positively moderating the relationship between deep-level diversity and group cohesion. This suggests that team leadership can strengthen the relationship between deep-level diversity and group cohesion among faculty members and administrative staff.

Introduction

Psychologists and sociologists have been inquiring and reviewing the concept of social cohesion for a long time (Albert, 1953). The term social cohesion refers to the "connectedness and solidarity among groups in society" (Kawachi & Berkman, 2000, p.175). It is also defined as a glue that holds society together (Tolsma et al., 2009). Forrest and Kearns (2001) suggested that social cohesion is closely related to social capital which is defined as "features of social organization, such as trust, norms, and networks, that can improve the efficacy of society by facilitating coordinated action" (Putnam et al., 1994, p.167). The scholars have identified the operational and conceptual similarities and differences between the two terms while others have used the two concepts interchangeably (Laurence, 2011; Letki, 2008).

In every team, there are certain people whose responsibility is to define the goals of the team and helping them to achieve the mission (Zaccaro et al., 2001). As Avolio and Bass (1995) pointed out, leadership is a process of social influence that can be applied to individuals or groups at multiple levels. Whereas other scholars had considered leadership as a collective influence process (Astin & Astin, 1996; House & Aditya, 1997). This study examine the moderating role of team leadership in the relationship between deep-level diversity and social cohesion.

Most of the work on diversity and group cohesion is done in the neighbourhood. Limited studies were identified that had studies these variables in an organizational context. As a result of high levels of leadership in the team, there was a positive correlation between educational diversity and the success of the team (Kearney & Gebert, 2009). According to Webber and Donahue (2001) and Yadav and Lenka (2020), there is no strong evidence and mixed findings between workgroup diversity and cohesion are present. As a result, this study suggests that future research should look into the relationship between diversity and previously unknown outcomes.

There has been a tendency in previous studies to focus primarily on social categorization diversity, giving less attention to informational diversity. While surface-level diversity can be beneficial, there is evidence that deep-level diversity in the workforce can enhance both organizational knowledge and perspectives (Ali et al., 2022; Telyani et al., 2022). However, challenges can arise when managing deep-level diversity, and this study proposes that effective team leadership and group cohesion can help optimize its advantages. The research presented here offers a theoretical perspective that can aid in understanding deep-level workforce diversity and in developing diverse organizations (Mitchell, 2022). Specifically, this study focuses on informational diversity, which is one type of deep-level diversity alongside relational and task-oriented diversity. Previous research has concentrated on social diversity, but this study highlights the importance of informational diversity in academic organizations (Townsend, 2022). To contribute to the literature, this study investigates team level diversity and group cohesion in public sector universities.

Second, The team leadership as moderator find an impact and stringent relationship between deep-level diversity and group cohesion on the employee in public sector universities.

The impact of this deep learning diversity on group cohesion depends on team leadership in any origination and employer performance and group cohesion. The findings of this study provide new insights into the existence of a considerable amount of knowledge about diversity at the team level and cohesion at the team level when team leadership is present, which may also help building and ideas for theory in diversity research. To fully appreciate the impact the diversity, researchers and practitioners should look at possible strategies such as leadership and team member growth, which would encourage cognitive elaboration and information sharing within work groups, bringing out the various expertise and skills embodied.

Literature Review

Theoretical Perspective with Workforce Diversity

Diversity encompasses a wide range of individual characteristics that differentiate people from one another, including age, gender, race/ethnicity, nationality, faith, tenure, educational and functional background, task skills, experience, attitude, and preferences (LeFevre-Levy et al., 2023). According to Williams and O'Reilly (1998), previous research has shown the value of diversity in organizational settings, with scholars such as Milliken and Martins (1996), Pelled (1996), and Williams and O'Reilly (1998) all highlighting its potential benefits.

Jehn et al. (1999) identified three distinct types of workgroup diversity: social category diversity, informational diversity, and value diversity. Informational diversity refers to differences in skills and perspectives related to job-related attributes such as tenure, functional background, and educational background, as noted by Tsui et al. (1992). Conversely, value diversity arises when members of an organization have varying values, opinions, and ways of thinking related to the organization's mission and purpose, as defined by Jehn et al. (1999). While functional conflicts and informational diversity can enhance organizational efficiency, dysfunctional behaviors such as prejudice and personality clashes can have a negative impact (Silver et al., 2023). Hence, it is imperative for organizations to create an inclusive environment that values diversity and leverages its potential benefits.

Group Cohesion

Previously literature suggest typologies for categorising diversity characteristics. According to Milliken and Martins (1996), for example, measurable characteristics as a person's age, gender, and race should not be confused with underlying characteristics as education, and tenure. Pelled (1996) distinguished between high and low visibility diversity characteristics, while Harrison et al. (1998) classified diversity as deep level and surface level diversity. Furthermore, classifications of diversity were identical based on the above diversity classifications (Webber & Donahue, 2001).

There is a concept referred to as social cohesion that refers to the “connections and solidarity among groups within society” (Kawachi & Berkman, 2000, p.175). It is also defined as

a glue that holds society together (Tolsma et al., 2009). It is considered a multidimensional construct that consists of phenomena on the macro, meso, and micro levels (Sakr et al., 2023). Macro-level deals with the features of social institutions, meso level constitutes features of groups and communities while micro-level deals with the attitude and orientations of individuals (Schiefer & Van der Noll, 2017). The construct is not recently discovered as it is rooted in the history of theoretical arguments that establish a social order in society and how it is maintained when there is a social change (Green et al., 2009; Green & Janmaat, 2011).

Chan et al. (2006) used a different approach to differentiate between objective and subjective parts of social cohesion. The example of the objective component of social cohesion includes crime rates, participation rate, etc whereas, the subjective component includes attitude, trust, and identification (Czapran, 2023). This can be applied to both vertical relations (between institutions and individuals) and horizontal relations (between individuals of the society). This is because, unlike attribute categories such as educational or functional experience, group members cannot easily switch in and out of these categories (Van Assche et al., 2023). “When qualities are difficult to penetrate, it is difficult for workers to ‘stand in the shoes' of others in another category,”.

H_1: Deep level workforce diversity has a impact with group cohesion.

Deep Level Diversity

Van Knippenberg and Schippers (2007) define diversity as the degree of subjective or objective differences that exist between the members of a group. The demographic differences between people are common in the organization making them a diverse organization(e.g, age, gender, ethnicity). However, the world is becoming a diverse place where, every one of us is living n racially, ethnically, or otherwise in diverse cities or workplaces (Atta et al., 2022; Hooghe et al., 2009). The negative and positive consequences of diversity are examined widely in the literature. Yet a study conducted by Putnam (2007) suggested that diversity negatively impacts social capital specifically trust.

There are two distinct types of tenure: corporate tenure and community tenure. Corporate tenure pertains to the overall length of time an individual has been employed within an organization. In contrast, team tenure refers to the duration of time that a group of individuals has worked together as a team (Knight & Eisenkraft, 2015). The impact of diversity in tenure on team and organizational performance has been examined in previous studies. For example, Van Knippenberg et al. (2011) investigated the influence of group diversity tenure on the profitability and effectiveness of top management teams, while Milliken and Martins (1996) explored the relationship between organizational tenure diversity and overall organizational performance. Furthermore, other empirical studies, such as those conducted by Joshi & Roh (2009) and Schippers et al. (2003), have examined group tenure as a measure of group performance and organizational tenure as a measure of organizational performance. Understanding the impact of

diversity in tenure is critical for organizations seeking to optimize team and organizational performance.

According to a report by Tsui et al. (1992), differences in organizational tenure, psychological engagement, and desire to remain were positively associated with diversity, while being present in the organization was negatively related. Poor leadership has been identified as a cause of poor team cohesion and integration (Puntaier & Zhu, 2023), according to Fichtner et al. (2000) and Yank et al. (1992). Furthermore, Sherony and Green (2002) found that a better quality of relationship with the leader was associated with better relationships with coworkers. Joshi and Roh (2009) conducted a meta-analysis and found that diversity was most strongly related to team leadership and performance in a functional context. Overall, research suggests that diversity in tenure can have both positive and negative effects on team and organizational performance, and that effective leadership is crucial for fostering team cohesion and maximizing the potential benefits of diversity (Abdelzaher & Latheef, 2023).

H_2: Team leadership has a relationship with group cohesion.

Team Leadership

According to Sivasubramaniam et al. (2002), team leadership is the collective influence of team members on each other. It involves behaviors within the team, such as self-evaluation, self-enforcement, and self-expectation, that enable individual members to recognize and be motivated by the team. Effective teams are those that have a clear vision that is understood by every member, and where each individual is willing to make sacrifices for the betterment of the team's vision or mission (Katzenbach & Smith, 1993). Such teams develop the potential of each member, work cohesively, and members recognize the purpose and values of the team (Kozlowski et al., 1996). Understanding the concept of team leadership is crucial in fostering teamwork, promoting effective communication, and motivating team members to achieve the team's goals.

Moderating role of Tem-leadership

In recent times, group work has gained more attention as it is believed to enhance versatility and adaptability in complex and unpredictable work environments (Kozlowski & Bell, 2012; Kozlowski & Ilgen, 2006). In this regard, leaders are expected to view their teams as a cohesive unit instead of disparate parts coming together. The leadership process involves fostering individual synergy, allowing their collective efforts to converge towards a common goal (Hogg & Reid, 2006; Northouse, 2021). Given the criticality of the leader-follower relationship (Ferris et al., 2009), workers make distinctions based on how they are treated by their leaders.

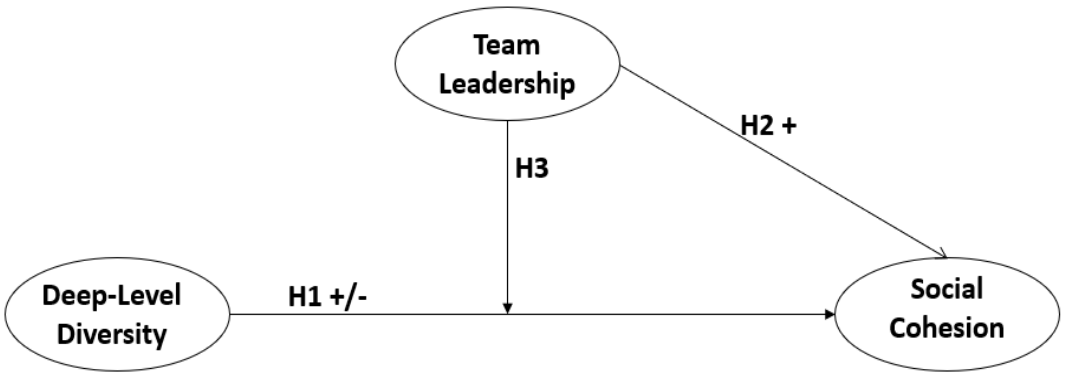
The relationship between diversity and group performance has been studied extensively. According to research, the presence of social categories with different cultures has a negative effect on the performance of groups, whereas the presence of informational diversity has a positive impact on the performance of groups due to the wide range of skills that diverse groups possess

(Van Knippenberg et al., 2004). However, social identity and categorization theories may hinder diversity by leading to the creation of subgroups based on characteristics such as race and gender, which can negatively affect inter-subgroup relations. Successful group work is achieved through mutual cooperation and teamwork, while conflict and lack of cooperation can hinder group performance and support. Leadership actions are essential in moderating the relationship between team members to ensure effective teamwork and cooperation.

These findings have been supported by logical explanations and philosophical understandings, which have helped in defining the different aspects of diversity and their implications. Theories have been developed to comprehend the significance of diversity in organizational settings, leading to a comprehensive debate on the topic. Overall, it is important for organizations to create an inclusive environment that values diversity and leverages its potential benefits while minimizing its negative effects.

H_3: Team leadership moderate the relationship between deep level workforce diversity and group cohesion.

Figure No 1: Research Framework



Method

The employees of different universities were the target population in this research work, mainly faculty members and administration staff which were equal and above the grade 17 to 20. The data from employee were collected through online survey form and self-administered questions. To reach its goal questionnaire data was used to get unbiased results. (McColl et al 2001). The researchers determined the minimum sample size for the study using G-power software, a power of 0.99 was calculated using an effect size (f^2) of 0.15, a type-I error probability of 0.05, and an effect size (f^2) of 0.15 (Fazal et al., 2021). In order to achieve the required statistical power, the study determined that a minimum of 107 participants was necessary for the sample size. To accomplish the research objectives, structural equation modeling was utilized. Specifically, the Partial Least Squares Structural Equation Modeling (PLS-SEM) method was selected due to its

common usage in the field of social sciences (Aldholay et al., 2018; REHMAN et al., 2020; Sabiu et al., 2019). Secondly, PLS-SEM is best when the objective of the study is to capture maximum variance into a dependent variable by the independent variables and all variables in the model (ANJUM et al., 2021; Hair et al., 2019; Riaz et al., 2022).

Measures

In this study, 24 items scale used to measure the latent constructs. The latent Constructs Items Source for deep level diversity was six, for the person focused and task focused leadership were four & six, respectively and for group cohesion the toal number of items were eight, four items for task cohesion and four for social cohesion. The scale adopted for the dimensions to measure team leadership through person focused and task focused leadership from (Leadership Behavior Description Questionnaire (LBDQ – form XII 1962) from (Bernardin, 1987). The group cohesion construct was also measure as high order and to measure group cohesion the first order two dimensions task cohesion and social cohesion were adopted from (Chang & Bordia, 2001). The deep level diversity construct was adopted from the (Kim, 2017; Sanchez & Medkik, 2004).

Results

As a first step in helping to gain a better understanding of the current study, to obtain a more comprehensive understanding of the situation, it has been decided to look at the demographic statistics of the respondents in order to obtain an even more comprehensive picture. The results shows that for the variable gender, 89.2% of the respondents were male and 10.8 % respondents were females. In the study job type of the respondents shows that 51.2 % are faculty members and 48.8% were belong to administration. Scale (BPS) indicates mostly respondents were 18 scale which are approximately 38% of the total sample, 33.8% of respondents were of 17 scale, 23.5% were of 19 scale (50 respondents), and 4.7% respondents were from 20 scale. In the analysis of the data, it was found that the majority of respondents had worked for a period of 11 to 15 years, accounting for 36.6% of the sample. Additionally, 23.5% of respondents have experience exceeding 15 years. A considerable 60% of respondents have work experience of over 10 years, while the remaining 40% have experience of less than 10 years. As for the final demographic variable, over 75% of respondents hold a Master's or MPhil degree, which amounts to approximately 160 respondents. Overall, these demographic indicators suggest that the sample comprises highly qualified and experienced individuals.

Before conducting reliability and validity assessments, it is critical to examine assumptions related to common bias, normality, and multicollinearity (Tabachnick and Fidell, 2007). In the measurement model evaluation, the reliability of each item, content validity, internal consistency, convergent validity, and discriminant validity must be tested, following the recommendations of (Sarstedt et al., 2014). To determine the reliability of individual items, researchers should examine the factor loadings for each variable, with Hair Jr. (2014) suggesting a threshold between 0.40 and 0.70.

In the case of the deep level diversity construct at the first order, the outer loadings met the criterion, with values between 0.735 and 0.907 (see Table 1).At second-order, deep level diversity had factor loadings ranging from 0.746 to 0.897 (Table 3). Overall, these findings suggest that the measurement model was reliable and met the necessary criteria for assessing the construct of deep level diversity.Similarly, the construct group cohesion which has two dimensions: task cohesion and social cohesion; at first order task cohesion had loadings ranged from 0.734 to 0.822, and for social cohesion, the loadings were ranged from 0.545 to 0.843. While at second order the dimensions of group cohesion as discussed above, for task cohesion the factor loading was 0.723, and for social cohesion it was 0.827.

Internal Consistency (First Order)

Hair and Ringle (2011) found that a composite reliability coefficient of 0.7 or higher is considered to be an acceptable value for measuring latent constructs. Table 1 presents the coefficients of composite reliability for the latent variables in this study. Deep level diversity composite reliability coefficient was 0.934 at first order, while at second order the composite reliability for Deep Level Diversity is 0.910. As for the construct Group cohesion at first order the social cohesion has composite reliability of 0.785, task cohesion 0.858. The composite reliability for the construct Team Leadership at first order; Person focused leadership is 0.909 and for task focused leadership it is 0.930.

Convergent validity (First Order)

The study evaluated the convergent validity of Fornell and Larcker's (1981) average variance extraction (AVE) and assessed if it met the threshold value of 0.5 or higher, as suggested by Chin (1998), to demonstrate the convergent validity of a variable. The results, as presented in Table 1, indicate that all constructs achieved a minimum AVE value of 0.50 at the first order level of analysis, which satisfies the recommended cutoff value for demonstrating convergent validity.

Table No1: Measurement Model (First Order)

Latent Variables	Factor Loadings	CR	(AVE)
Deep Level Diversity		0.934	0.702
DLD1	0.862		
DLD2	0.907		
DLD3	0.888		
DLD4	0.735		
DLD5	0.804		
DLD6	0.818		
Group Cohesion			
Task Cohesion		0.858	0.602
TC1	0.822		
TC2	0.753		
TC3	0.734		

TC4	0.792		
Social Cohesion		0.785	0.558
SC1	0.545		
SC3	0.816		
SC4	0.843		
Team Leadership			
Person Focused Leadership		0.909	0.715
PFL1	0.800		
PFL2	0.864		
PFL3	0.907		
PFL4	0.806		
Task Focused Leadership		0.930	0.688
TFL1	0.779		
TFL2	0.820		
TFL3	0.863		
TFL4	0.851		
TFL5	0.886		
TFL6	0.773		

Discriminant validity (First Order)

Table No 2: Discriminant Validity (First Order)

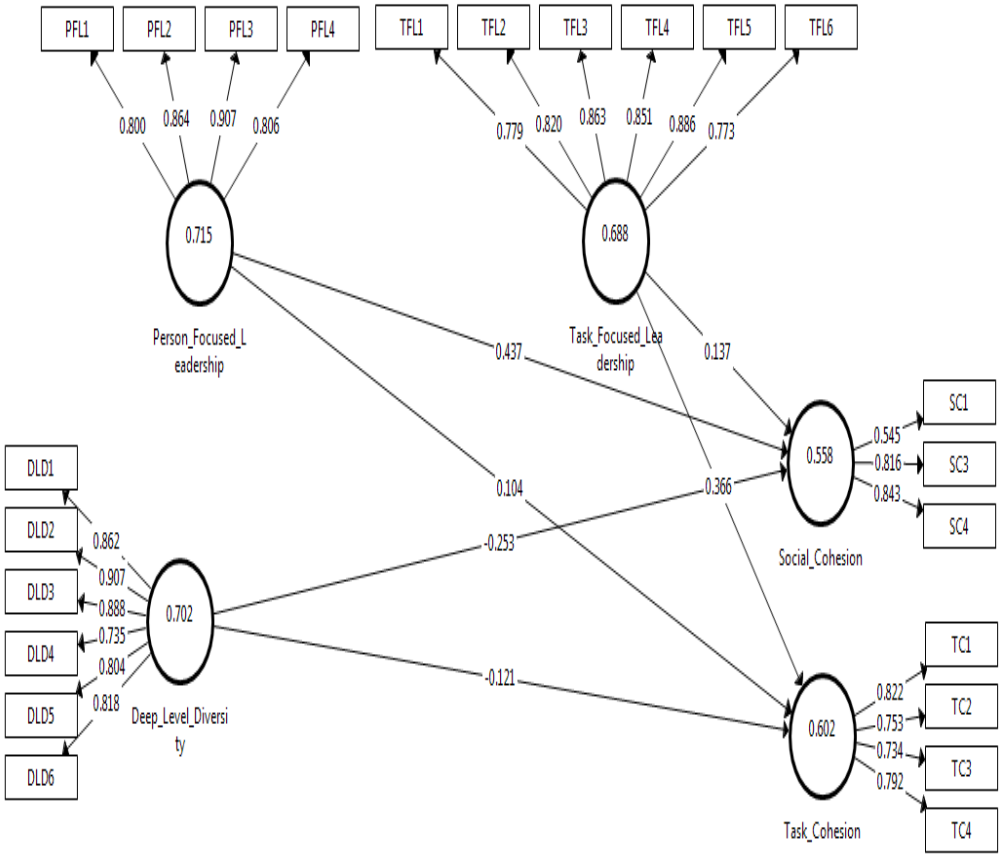
Fornell-Larcker Criterion					
	DLD	**PFL**	**SC**	**TC**	**TFL**
DLD	**0.838**				
PFL	0.171	**0.846**			
SC	-0.156	0.492	**0.747**		
TC	-0.044	0.348	0.209	**0.776**	
TFL	0.160	0.723	0.412	0.422	**0.830**
HTMT Ratio					
DLD					
PFL	0.240				
SC	0.225	0.642			
TC	0.124	0.422	0.362		
TFL	0.200	0.816	0.515	0.485	

Note: The non-diagonal values show the correlations between constructs, while diagonals and Italicized entries show the square root of the AVEs.

In a study conducted by Umrani et al. (2018), they aimed to assess the discriminant validity of a model using subsequent benchmarks proposed by Fornell and Larcker (1981). According to the benchmark, the square root of Average Variance Extracted (AVE) should be greater than the

correlation between the variables in question. The results presented in Table 2 of the study demonstrated that the square root of the AVE was higher than the correlations between variables during the initial analysis. To examine the discriminant validity further, the Heterotrait-Monotrait Ratio (HTMT) method, recommended by Henseler et al. (2009), was employed. According to the method, an HTMT score of below 0.85 or 0.90 is considered acceptable. In this study, the HTMT scores for the latent variables ranged from 0.124 to 0.816, all of which were below the threshold of 0.85. As a result, the findings in Table 2 confirm that there is no issue of discriminant validity.

Figure No 2: Measurement Model (First Order)



Reliability of Individual Items (Second Order)

The latent construct of team leadership has two dimensions, and Person focused leadership and Task focused leadership. At first order the loadings for person focused leadership ranged from 0.800 to 0.907 and for task focused leadership the loadings were 0.773 to 0.886 (See Table 3).

Table No 3: Measurement Model (Second Order)

Latent Variables	Factor Loadings	CR	AVE
Deep Level Diversity		0.933	0.701
DLD1	0.860		
DLD2	0.897		
DLD3	0.894		
DLD4	0.746		
DLD5	0.815		
DLD6	0.800		
Group Cohesion		0.752	0.603
Social Cohesion	0.827		
Task Cohesion	0.723		
Team Leadership		0.926	0.861
Person Focused Leadership	0.930		
Task Focused Leadership	0.926		

Similarly, at second order the factor loading for person focused leadership was 0.930 and for task focused leadership the outer loading was 0.926. The study presents successfully achieved individual element reliability criterion (see Table 3), all items are reasonably up to 0.5 or more. The item SC2 is deleted because its loading was below 0.5 which effects convergent validity, discriminant validity, and Composite Reliability.

Internal Consistency (Second Order)

According to Hair and Ringle (2011), the coefficient of composite reliability for latent constructs was calculated. Table 3 presents the coefficients of composite reliability for the latent variables used in this study. The second-order level the composite reliability for Group cohesion is 0.752 and second order the composite reliability for Team Leadership is 0.926. Composite reliability for each unobserved variable indicates an acceptable value for the reliability.

Convergent Validity (Second order)

Using the average variance extracted (AVE) value as an indicator of convergence validity, As proposed by Fornell and Larcker (1981), convergence validity was evaluated based on AVE value. Table 3 depicts the minimum value of 0.5 was reached for all the variables. For the construct Deep Level Diversity AVE is 0.701, for group cohesion 0.603 and for team leadership its 0.861, and this shows that it is not an issue of convergent validity in the analysis at the Second Order level of analysis.

Discriminant Validity (Second order)

The AVE square root of the AVE was, however, found to be higher than the correlations between variables when the analysis was carried out at the second order, as shown by Table 4. To address this issue, the Heterotrait-Monotrait Ratio (HTMT) method recommended by Henseler et al. (2009) was employed to estimate discriminant validity. The HTMT method suggests an acceptable ratio of less than 0.85. Applying the method at the second order level of analysis, the HTMT scores for the latent variables were below the threshold of 0.85, as shown in Table 4. Therefore, based on the results of this study, there is no concern about the discriminant validity of the variables.

Structural Model

A 5000-sample resampling bootstrapping procedure was used in the analysis of the structure model of the study, with 213 cases (Hair et al., 2019). As a result of evaluating the structural model in its entirety, Table 5 presents the results of the evaluation. The findings indicated a significant negative relationship between Deep Level diversity and Group Cohesion, with a beta coefficient of -0.296, a t-value of 2.507, and a p-value of 0.006. Therefore, this result supports H1 of the study.

The study findings suggest a significant positive relationship between Team Leadership and Group Cohesion, as evidenced by a beta coefficient of 0.589, a t-value of 11.605, and a p-value less than 0.05, supporting hypothesis H2. Additionally, the study found that Team Leadership plays a significant moderating role in the relationship between Group Cohesion and Deep Level Diversity, supported by a beta coefficient of 0.206, a t-value of 2.662, and a p-value of 0.004, in line with hypothesis H3.

Overall, these results suggest that Team Leadership is a critical factor influencing Group Cohesion in comparison to other explanatory variables.

Table No 4: Discriminant Validity (Second Order)

Fornell-Larcker Criterion			
	DLD	**GC**	**TL**
DLD	**0.837**		
GC	-0.139	**0.777**	
TL	0.185	0.583	**0.928**
HTMT Ratio			
DLD			
GC	0.208		
TL	0.244	0.878	

Table No 5: Hypothesis Testing

Hypothesis	**B**	**S. E**	***T*-Value**	**P-Values**	**Decision**
Deep Level Diversity → Group Cohesion	-0.296	0.118	2.507	0.006	Supported
Team Leadership → Group Cohesion	0.589	0.051	11.605	0.000	Supported
TL×DLD → Group Cohesion	0.206	0.077	2.662	0.004	Supported

Note: *** means p <0.01

Model Prediction

To evaluate the PLS structural model, the study followed Henseler et al.'s (2009) recommendation to use R2. As shown in Table 6, the obtained R2 value of 0.453 indicates a strong association among variables, suggesting that Deep Level Diversity and Team Leadership combined can account for 45 percent of the variance in Group Cohesion. To assess the model's predictive validity, a cross-validated redundancy test, also known as Q2, was conducted in accordance with the guidelines outlined by (Chin, 2010). There is an indication that the relevance of a research model will be greater than zero when the Q2 value is greater than zero, as suggested by (Henseler et al., 2009). Similarly, as shown in Table 6, the Q2 value of 0.243 is greater than zero which displays that the model is able to predict with a high degree of predictive relevance.

Table No 6: Model Fit

	Q^2	R^2	Adjusted R^2	f^2
Group Cohesion	0.243	0.453	0.445	
Deep Level Diversity				0.150
TL×DLD				0.092
Team Leadership				0.595

Discussion

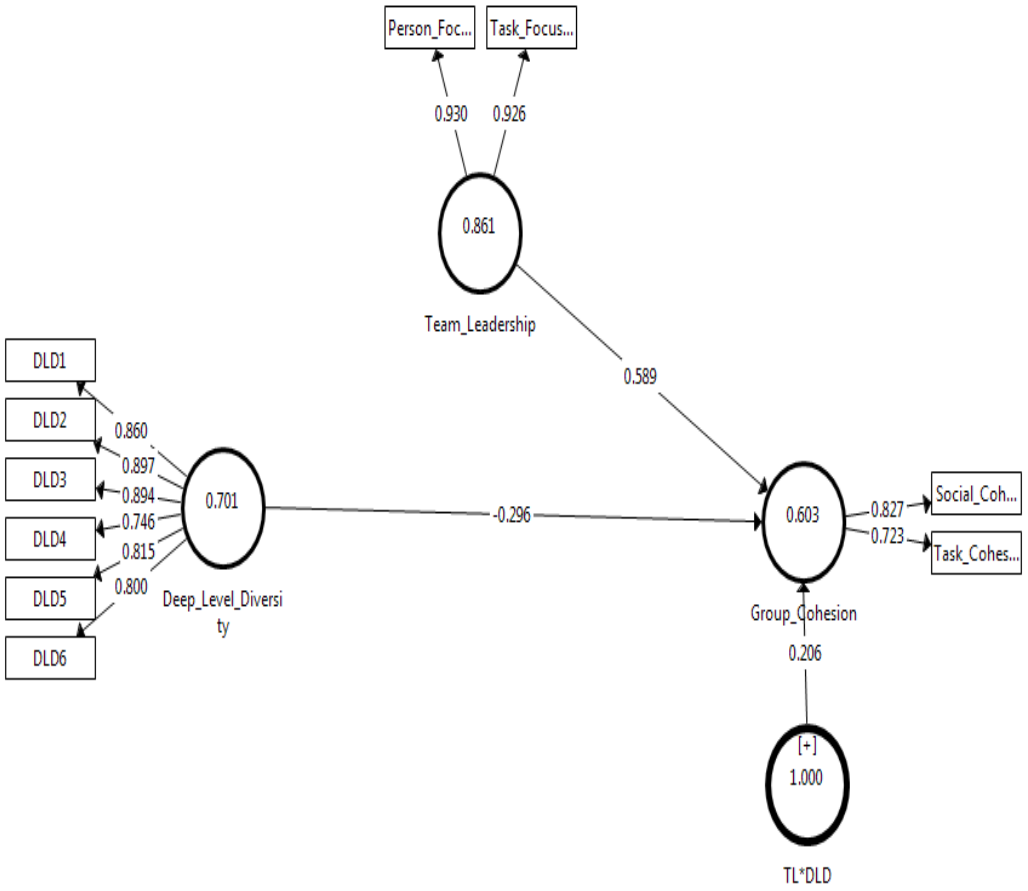
There is a consistent pattern of evidence that diversity in measurable characteristics has negative effects on the cohesion of groups (e.g., affiliation with a group, satisfaction with the group). Furthermore, diversity based on race and gender has been shown to have greater negative effects than diversity based on age (Tsui et al., 1992). The results of the study support the theory that people tend to behave more like one another when they have more in common in terms of context variables like social status or behavior (Kanter, 2008; Pfeffer, 1983; Ziller, 1969). Since people get to know each other and have a stronger respect and awareness of the group's differences, the negative affective outcomes associated with diversity decrease.

Ancona and Caldwell (1992), O'Reilly et al. (1989), and Zenger and Lawrence (1989) conducted studies that demonstrated the influence of organizational dynamics on the frequency of interaction and attraction between individuals. As a result, group heterogeneity can have negative consequences on feelings of belonging and social cohesion, as evidenced by Smith et al. (1994). Research findings indicate that groups with skill-based diversity may experience increased coordination costs in comparison to groups with more uniform skills or backgrounds. Moreover, the presence of diversity in both organizational and group tenure can lead to reduced social integration, elevated group turnover rates, and a higher likelihood of individual turnover among those who differ from the group. Subordinates with similar organizational tenure are preferred by supervisors, who then provide them with higher performance ratings (Webber & Donahue, 2001).

Klein and Wang (2010) similarly found that shared values and attitudes among team members within an organization can positively impact group performance. This may be due to the fact that people from similar backgrounds tend to share similar values and experiences, leading to

positive reinforcement when engaging with one another. The leadership style of a project team can significantly impact teamwork, and there is a positive relationship between leadership and group performance (Hoegl & Gemuenden, 2001; Müller et al., 2011; Turner & Müller, 2005, 2006). Hill et al. (2019) suggest that deep-level similarities can eventually dominate surface-level differences when evaluating leadership effectiveness. This indicates that hiring leaders based on surface-level diversity has little negative impact on an organization in the long run.

Figure No 3: Measurement Model (Second Order)



Moreover, training leaders to promote common organizational values, priorities, and attitudes among their team members can foster deep-level similarity within their teams, leading to positive organizational outcomes over time. Relational attention from leaders, as demonstrated by Reb et al. (2014), enhances relationship efficiency, resulting in more favourable attitudes and behaviours from subordinates. Leaders and project managers must use new and improved knowledge and reasoning to promote ingenuity while achieving group cohesion, ensuring high success and loyalty (Sosik & Godshalk, 2000).

Conclusion

This research aims in determining the impact of deep-level diversity on social cohesion and the moderating role of team leadership in this relationship. The model was tested on 213 faculty and administration staff of different universities of Quetta. The results indicated a significant negative relationship between deep-level diversity and social cohesion. A positive association exists between team leadership and group cohesion. Finally, team leadership moderated the relationship between deep-level diversity and social cohesion.

Limitations and Recommendations

First, the analysis is cross-sectional, limiting the path of causality. Longitudinal data may be used in future research to reproduce the results of this one. The study's second drawback is its dependence on highly sensitive self-report data on the constructs. Measures based on self-report are subjective. Respondents may give false information by giving an over or underrating to a phenomenon. As a result, a 360-degree approach to data collection is recommended.

Third, this research is limited to educational institutions and presents faculty members' findings. As a consequence, the findings cannot be applied to other industries. The model can be applied to other industries to determine the important outcomes in dealing with diversity. Future researchers should look into this model at other Pakistani universities to get a better picture of diversity, social cohesion, and team leadership. This research could be applied to all Pakistani higher education institutions.

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