

STUDY OF WORKFORCE DIVERSITY AND ITS IMPACT ON INNOVATIONS IN ORGANIZATION'S STRATEGY BUILDING" (WITH SPECIAL REFERENCE TO GENDER DIVERSITY IN MANAGEMENT EDUCATION INSTITUTES OPERATING IN NORTHEAST REGION)"

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Abstract:

The inter-relationship between diversity and innovation is explored based on a review of existing literature and business practices. The terms "diversity" and "innovation" will be defined, and evidence for the linkage between the two will be outlined. In addition, the rationale for why there is a link will be presented, along with what the main challenges and barriers are said to be in exploiting this relationship.

Keywords: Diversity, innovation, organization, employees, work environment etc.,

INTRODUCTION

The inter-relationship between diversity and innovation is explored based on a review of existing literature and business practices. The terms "diversity" and "innovation" will be defined, and evidence for the linkage between the two will be outlined. In addition, the rationale for why there is a link will be presented, along with what the main challenges and barriers are said to be in exploiting this relationship. In Part 3, a presentation and discussion of original empirical research with a cross section of companies from across Europe will be used to evaluate the degree to which the link between diversity and innovation is recognized and how companies understand its potential benefits and challenges.

Understanding the relationship between diversity and innovation;

The interplay between diversity and innovation in organizational settings is a complex and at times challenging one. This section of the report explores the way in which innovation and diversity are defined and the nature of the evidence of previous research into the interrelationship between them. The intention is to arrive at a clear working definition, an understanding of the key themes and issues, and to reveal the multifaceted contribution that effective management of diversity makes to improved innovation in a business setting.

- Organizations with a diverse workforce can provide superior services because they can better understand customers' needs Hiring women, minorities, disabled, etc. will help organizations to tap these niche markets and diversified market segments.
- As all the segments of society have a stake in the development and prosperity of society as a whole, creating and managing a diverse workforce should be seen as a social and moral imperative.
- As the economies are shifting from manufacturing to service economies, diversity issues will gain importance because in a service economy effective interactions and communications between people are essential to business success.
- As globalization is increasing, diversity will help organizations to enter the international arena.
- Diversity enhances creativity and innovation, and produces competitive advantages.
- Diverse teams make it possible to enhance flexibility and rapid response and adaptation to change.

REVIEW OF LITERATUR

Up till now, there are numerous research works & studies, have been made by the respective researchers, that influence my research motive to this stage,

By R. M. Wentling, N. Palma-Rivas: (2011)

The main focus of this report is to describe in detail the literature on diversity in the workforce to bring about an understanding of the complexity and breadth of workplace diversity issues. The report also intends to provide insights on the trends that have emerged in the field of diversity, and information that can be used to develop new and unique approaches that fit the specific needs of particular organizations. To accomplish this, the authors summarized information on workforce diversity issues from research studies, books, reports, journal articles, related magazines, and newspaper articles on diversity in the workforce. The sources of information used in this review ranged in date from 1961 to 1997. The literature reviewed was summarized and categorized under the following sections: Diversity Defined, The Changing Society and Workforce, Why Organizations Are Managing and Valuing Diversity, Barriers to Managing Diversity, Strategies for Managing Diversity, Diversity Training, and Future Trends. In addition, readers are provided with useful information such as a glossary of diversity terms and a list of videos on the topic.

By Wentling, Rose Mary; Palma-Rivas, Nilda;(2010)

The literature on diversity in the work force was reviewed to determine the complexity and breadth of workplace diversity issue and identify trends in diversity management and training. The literature review focused on the following: definition of diversity; changing society and work force; reasons organizations are managing and valuing diversity; barriers to managing diversity; diversity training; and future trends. Although many different definitions of diversity

were found, none fully included all the characteristics that a diverse population may bring to the workplace. It was concluded that, because the U.S. demographic composition is affecting the makeup of both the labor force and the marketplace, having a diverse work force and managing it properly are increasingly being perceived as competitive strategies that can attract both diverse customers and employees who have different perspectives, enhancing the organization's creativity. Corporate productivity and profitability have been deemed important reasons for implementing diversity initiatives, including diversity training. Needs assessment and evaluation and the qualifications of diversity trainers were identified as essential elements in the process of developing diversity training programs.

By Ahmed Abdullah, HR employee, DEWA, (2009)

He believes that a diverse workforce at DEWA helps to improve the work culture and enable multi-tasking. He further commented that in a heterogeneous work environment, each employee can observe and adopt positive ideas and working skills from others.

A diverse workforce could also negatively impact productivity if diversity introduces communication and cooperation challenges not present among homogeneous workers (Lang, 1986)

Critical review of literature on workforce diversity, Ongori Henry and Agolla J. Evans University of Botswana, Botswana. Accepted 27, June 2007:

Workforce diversity is a primary concern for most of the businesses. Today's organisations need to recognise and manage workforce diversity effectively. Many articles have been written on this topic but there is no specific definition of workforce diversity. The main purpose of this article is to review the literature of workforce diversity. What is workforce diversity? What are the benefits of workforce diversity in organisations, what management can do to enhance work force diversity in organisations? What are the disadvantages of workforce diversity? .This questions would be main purpose of this article.

Workforce diversity is a complex phenomenon to manage in an organisation. The management of workforce diversity as a tool to increase organizational effectiveness cannot be underscored, especially with current changes sweeping across the globe. It is argued that organizations that value diversity will definitely cultivate success and have a future in this dynamic global labour market (Jain and Verma, 1996). Workforce diversity management has become an important issue for both governments and private organizations. Its importance has mainly been brought about by the free movement of labour due to globalization and the fight for human rights by certain minority groups who feel excluded from the employment sector. The workforce diversity emerged mainly to further the availability equal opportunities in the workplace. This equal opportunity philosophy is aimed at ensuring that organizations make the most out of the difference from a diverse workforce rather than losing talent which might assist the organization to be more efficient and effective. The increased mobility and interaction of people from diverse backgrounds as a result of improved economic and political systems and the recognition of human rights by all nations has put most organizations under pressure to embrace diversity at the work place. Diversity brings with it the heterogeneity that needs to be

nurtured, cultivated and appreciated as means of increasing organizational effectiveness in this competitive world.

RESEARCH METHODOLOGY

Objectives:

Following research question came to my mind to answer these questions following objective and sub objective have been set.

- 1) To study the impact of gender diversity on innovation in organizations strategy building.
- 2) To studies the difference in perception in about diversity status between male and female employees.
- 3) To understand the difference between male and female employees on the basis of development opportunities, competence and productivity.

RESEARCH DESIGN

1. Selective type of research:

Parameters of study: Gender diversity & innovations in organizational settings is to be described. Therefore descriptive research has been selected.

2. Sampling size:

No of sample 100 out of total number of universe 500.

3. Sample technique:

Proportionate stratified technique.

4. Data requirement:

Required information will be gathered in the form of primary data.

5. Data collection technique:

Questionnaire method will be use.

6. Data collection instrument:

Structured questionnaire will be designed

7. Analysis of data:

Deductive analysis will be done through suitable statistical technique.

8. Operational methodology:

Questionnaire will be handed over to the responded in a face to face interaction & respondent will request to fill in the questionnaire in presence of researcher.

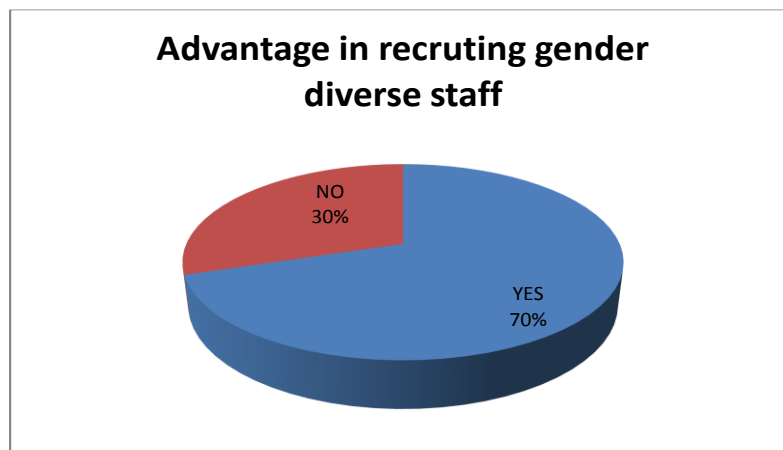
DATA ANALYSIS AND INTERPRETATION

Following are the Questionnaire-

1. Does organization believe there is advantage in recruiting a gender diverse staff?

a. YES

b. NO



Interpretation: 30% of population interpreted no & 70% of population interpreted that there are advantage in recruiting gender diverse staff.

	Yes	No	
Male	40	10	50
female	30	20	50
	70	30	100

Null Hypothesis (Ho): organization believes there is no advantage in recruiting a gender diverse staff.

Alternative Hypothesis (H1): organization believes there is an advantage in recruiting a gender diverse staff

Level of significance =5%

Total number of respondents = (40+30+10+20) = 100

Expected frequency= (Ei) = Total number of respondents/no of opinions=100/2=50

$$\text{CHI SQUARE (x2)} = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

Opinion	Observed frequency (O _i)	Expected frequency (E _i)	(O _i -E _i)	(O _i -E _i) ²	(O _i -E _i) ² /E _i
Male who say yes	40	35	5	25	0.71
Female who say yes	10	15	-5	25	1.66
Male who say no	30	35	-5	25	0.71
Female who say no	20	15	5	25	1.66
					4.74

$$\sum [(O_i - E_i)^2 / E_i] = 4.74$$

$$\text{Degrees of freedom} = (r-1)(c-1) = (2-1)(2-1) = 1$$

The table value of χ^2 for degree of freedom 1, at 5% level of significance is 3.84

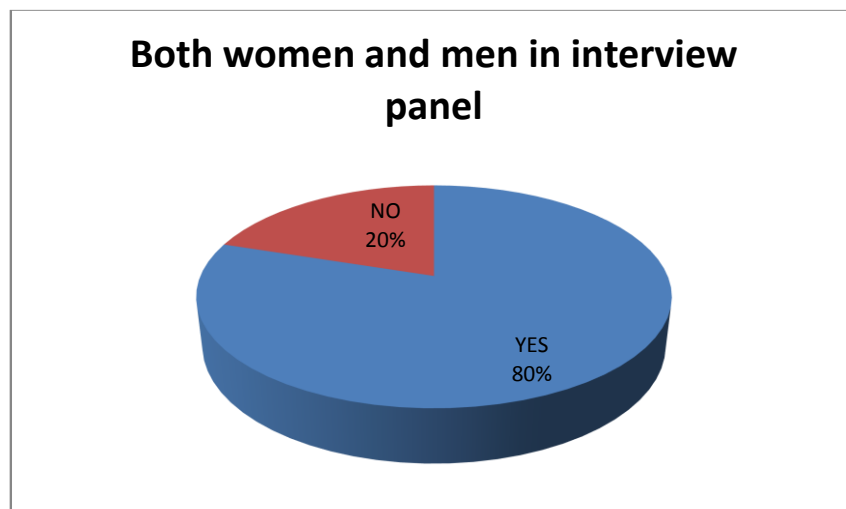
$$\chi^2 \text{ computed value} = 4.74$$

We can see that the calculated value is greater than the table value so the null hypothesis will be rejected and the alternative hypothesis will be accepted.

2. Does organization insure that both women and men are in interview panel?

a. YES

b. NO



Interpretation: 20% of population interpreted no & 80% of population interpreted that both women and men should be in interview panel.

	Yes	No	
Male	35	15	50
female	45	5	50
	80	20	100

Null Hypothesis (H₀): both men and women won't be in the interview panel

Alternative Hypothesis (H₁): both men and women will be in the interview panel

Level of significance =5%

Total number of respondents = (35+15+45+5) =100

Expected frequency= (E_i) = Total number of respondents/no of opinions=100/2=50

$$\text{CHI SQUARE } (\chi^2) = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

Opinion	Observed frequency (O _i)	Expected frequency (E _i)	(O _i -E _i)	(O _i -E _i) ²	(O _i -E _i) ² /E _i
Male who say yes	35	40	-5	25	0.63
Female who say yes	45	40	5	25	0.63
Male who say no	15	10	5	25	1.67
Female who say no	5	10	-5	25	5
					7.93

$$\sum [(O_i - E_i)^2 / E_i] = 7.93$$

$$\text{Degrees of freedom} = (r-1)(c-1) = (2-1)(2-1) = 1$$

The table value of χ^2 for degree of freedom 1, at 5% level of significance is 3.84

$$\chi^2 \text{ computed value} = 7.93$$

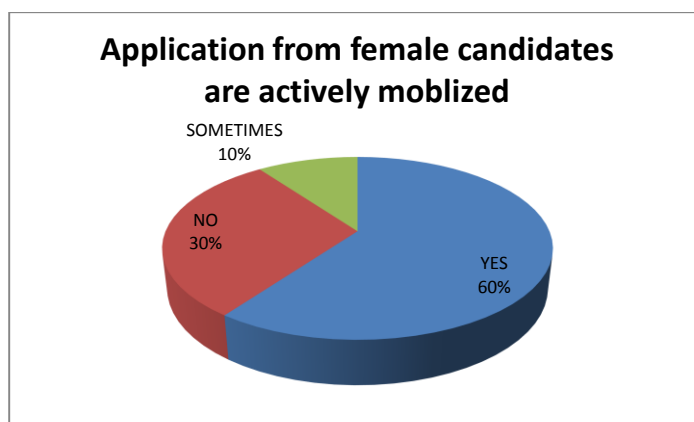
So we can see that the table value is less than the calculated value. So the null hypothesis will be rejected and the alternative hypothesis will be accepted.

3. Does organization ensure that applications from female candidates are actively mobilized?

a. Yes

b. No

c. Sometimes



Interpretation: 30% of population interpreted yes 30% said no & 10% of population interpreted that sometimes the organization ensures that applications from female candidates are actively mobilized.

	Yes	No	Sometimes	
Male	32	16	2	50
female	28	14	8	50
	60	30	10	100

Null Hypothesis (H₀): applications from female candidates are actively mobilized.

Alternative Hypothesis (H₁): applications from female candidates are not actively mobilized.

Level of significance = 5%

Total number of respondents = (32+28+16+14+2+8) = 100

Expected frequency= (E_i) = Total number of respondents/no of opinions=100/3=33.33

$$\text{CHI SQUARE } (\chi^2) = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

Opinion	Observed frequency (O _i)	Expected frequency (E _i)	(O _i -E _i)	(O _i -E _i) ²	(O _i -E _i) ² /E _i
Male who say yes	32	30	2	4	0.13
Female who say yes	28	30	-2	4	0.13
Male who say no	16	15	1	1	0.067
Female who say no	14	15	-1	1	0.067
Male who say sometimes	2	5	-3	9	1.8
Female who say sometimes	8	5	3	9	1.8
					3.994

$$\sum [(O_i - E_i)^2 / E_i] = 3.994$$

Degrees of freedom = $(r-1)(c-1) = (3-1)(2-1) = 2$

The table value of χ^2 for degree of freedom 2, at 5% level of significance is 5.99

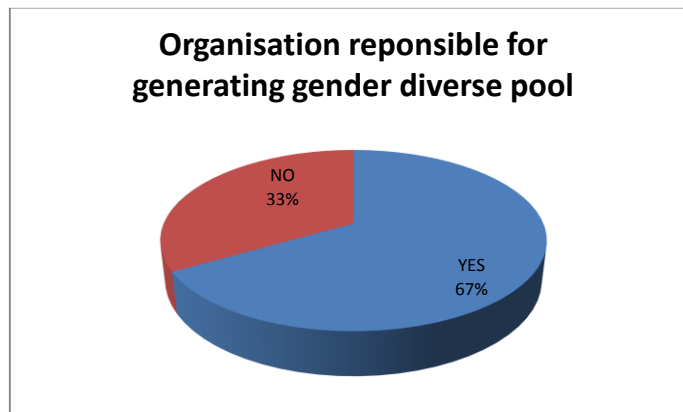
χ^2 computed value = 3.994

So we can see that the table value is less than the calculated value. So the null hypothesis will be rejected and the alternative hypothesis will be accepted.

4. Is organization held accountable for generating gender diverse pool of high quality candidate?

a. Yes

b. No



Interpretation: 33% of population interpreted no & 67% of population interpreted that organization is responsible for generating gender diverse pool.

	Yes	No	
Male	35	15	50
female	32	18	50
	67	33	100

Null Hypothesis (H₀): organization is responsible for generating gender diverse pool

Alternative Hypothesis (H₁): organization is not responsible for generating gender diverse pool

Level of significance = 5%

Total number of respondents = (35+15+32+18) = 100

Expected frequency = (E_i) = Total number of respondents/no of opinions = 100/2 = 50

$$\text{CHI SQUARE } (\chi^2) = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

Opinion	Observed frequency (O_i)	Expected frequency (E_i)	$(O_i - E_i)$	$(O_i - E_i)^2$	$(O_i - E_i)^2 / E_i$
Male who say yes	35	33.5	1.5	2.25	0.07
Female who say yes	32	33.5	-1.5	2.25	0.07
Male who say no	15	16.5	-1.5	2.25	0.14
Female who say no	18	16.5	1.5	2.25	0.14
					1.14

$$\sum [(O_i - E_i)^2 / E_i] = 1.14$$

Degrees of freedom = $(r-1)(c-1) = (2-1)(2-1) = 1$

The table value of χ^2 for degree of freedom 1, at 5% level of significance is 3.84

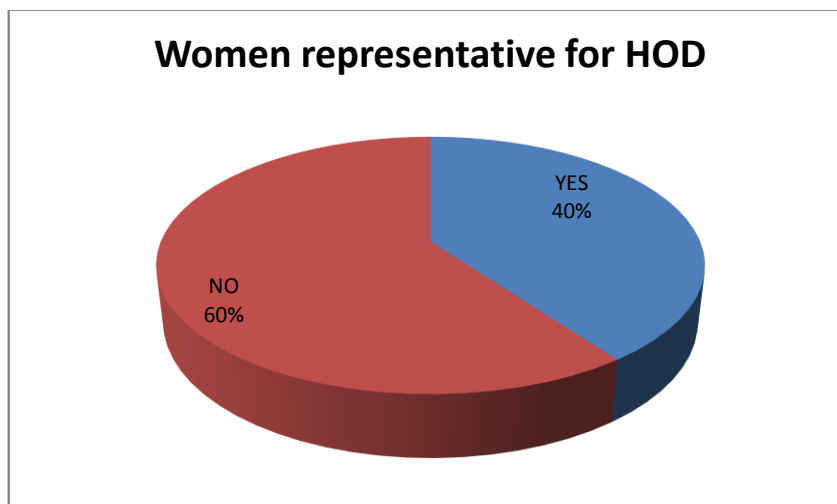
χ^2 computed value = 1.14

So we can see that the table value is greater than the calculated value. So the null hypothesis will be accepted and the alternative hypothesis will be rejected.

5. Are women represented in the head of the department?

a. Yes

b. No



Interpretation: 60% of population interpreted no & 40% of population interpreted that there should be women represented in the head of the department.

	Yes	No	
Male	18	32	50
female	22	28	50
	40	60	100

Null Hypothesis (H₀): no women representative for HOD

Alternative Hypothesis (H₁): women representative for HOD

Level of significance =5%

Total number of respondents = (18+32+22+28) =100

Expected frequency= (E_i) = Total number of respondents/no of opinions=100/2=50

$$\text{CHI SQUARE } (\chi^2) = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

Opinion	Observed frequency (O _i)	Expected frequency (E _i)	(O _i -E _i)	(O _i -E _i) ²	(O _i -E _i) ² /E _i
Male who say yes	18	20	-2	4	0.2
Female who say yes	22	20	2	4	0.2
Male who say no	32	30	2	4	0.13
Female who say no	28	30	-2	4	0.13
					0.66

$$\sum [(O_i - E_i)^2 / E_i] = 0.66$$

Degrees of freedom=(r-1) (c-1) = (2-1)(2-1)=1

The table value of χ^2 for degree of freedom 1, at 5% level of significance is 3.84

χ^2 computed value = 0.66

So we can see that the table value is greater than the calculated value. So the null hypothesis will be accepted and the alternative hypothesis will be rejected.

6. Does the organization reward people who take initiative for cultural program in the organization?

a. Yes

b. No



Interpretation: 35% of population interpreted no & 65% of population interpreted that organization reward people who take initiative for cultural program.

	Yes	No	
Male	33	17	50
female	32	18	50
	65	35	100

Null Hypothesis (Ho): organization should reward people who take initiative for cultural program

Alternative Hypothesis (H1): organization should not reward people who take initiative for cultural program

Level of significance =5%

Total number of respondents = (33+32+17+18) =100

Expected frequency= (Ei) = Total number of respondents/no of opinions=100/2=50

$$\text{CHI SQUARE (x2)} = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

Opinion	Observed frequency (O _i)	Expected frequency (E _i)	(O _i -E _i)	(O _i -E _i) ²	(O _i -E _i) ² /E _i
Male who say yes	33	32.5	0.5	0.25	0.008
Female who say yes	32	32.5	-0.5	0.25	0.008
Male who say no	17	17.5	-0.5	0.25	0.014
Female who say no	18	17.5	0.5	0.25	0.014
					0.044

$$\sum [(O_i - E_i)^2 / E_i] = 0.044$$

Degrees of freedom = (r-1) (c-1) = (2-1)(2-1) = 1

The table value of χ^2 for degree of freedom 1, at 5% level of significance is 3.84

χ^2 computed value = 0.044

So we can see that the table value is greater than the calculated value. So the null hypothesis will be accepted and the alternative hypothesis will be rejected.

RESEARCH HYPOTHESIS:

Null Hypothesis (H₀): Workforce diversity does not have any significant impact on innovations in terms of organization's strategy building.

Alternative Hypothesis (H₁): Workforce diversity has significant impact on innovations in terms of organization's strategy building.

Level of significance = 5%

Total number of respondents = 100

$$\text{CHI SQUARE } (\chi^2) = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i = Observed frequency

E_i = Expected frequency

TABLE calculation of χ^2

$$\sum [(O_i - E_i)^2 / E_i] = (4.74 + 7.93 + 3.99 + 1.14 + 0.66 + 0.04 + 1.78 + 0.04 + 0.44 + 0.08) = 20.84$$

Degrees of freedom = (10-1) = 9

The table value of χ^2 for degree of freedom 9, at 5% level of significance is 16.91

χ^2 computed value = 20.84

Thus we can well justify that the table value is less than the calculated value. So, the **null hypothesis will be rejected and the alternative hypothesis will be accepted.**

By the help of findings & interpretation mentioned above, the study results can prove that the **workforce diversity do have significant impact on innovations in terms of organization's strategy building.**

FINDINGS

Men are more dominating than women in class. Women tend to be involved in their personal problem and this is reflected in their behaviour. In most of the questions it is being observed that null hypothesis is being accepted in common, which can help to justify that workforce diversity helps in innovations of organizational setting.

CONCLUSION

The study can be concluded by stating that the training and development sessions should be given due attention by conduct training programs for male and female faculties together so that hesitation can be removed and they can work in friendly environment. And the gender based hesitations (while working together), among most of the male and female faculties can be removed. Further some conclusions are women should keep their personal and professional life separate so that both can be balanced. Male should extend their helping hands towards women so that they will feel motivated.

Since the study cannot be constrained within the limit of findings, thus the outcomes of this study can be extended ahead in the hands of future researchers with the same interest so that some more outcomes can also be introduced to discourage the other diverse gender barriers.

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