**Title:**

***A study of awareness towards sustainable development of people of Indore City***

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 **Abstract**

*Sustainable Development is the development that meets the need of the present without compromising the ability of future generation to meet their needs. It is the need of the present era that development should be sustainable in all the four dimensions of the development i.e. social, economic, environmental and cultural. The present study was taken to find out the awareness towards sustainable development of People of Indore city. A sample of 141 people of different age groups, socio economic status, working status and gender was selected. An awareness scale was developed to collect the data. The two objectives of the study were “To study the awareness of people of Indore city towards sustainable development” and “To compare the mean awareness scores towards sustainable development of male and female people of Indore city”. Data were analyzed with the help of Mean, Standard Deviation, Coefficient of variation and t test. Assumptions of Parametric test were tested before proceeding for t test. The findings of the study were “People of Indore city of different age group, SES, Working status and gender are quite aware towards sustainable development “ and “Male and Female people of Indore city are equally aware towards sustainable development and there is no significant difference in the awareness score of male and female people*.”

**Introduction**

During the eighties and particularly after the **Rio conference** in 1992 the notion of “sustain-ability” has become increasingly popular and there have been numerous attempts to define “**sustainability**” in order to make this term more operational. The pivotal idea for all these definitions is adopted from the so called **Brundtland report, 1987**. According to this report a development is sustainable, if it meets the **needs** of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: The concept of **needs**, in particular the essential needs of the world's poor (Equity) to which overriding priority should be given; and the idea of **limitations** (Economical, technological, and social) which affect the environment's ability to meet present and future needs. The world is faced with challenges in all three dimensions of sustainable development—economic, social and environmental. An **economically sustainable** system must be able to produce goods and services on a continuing basis, to maintain manageable size of government and external debt and to avoid sectoral imbalances. An **environmentally sustainable** system must deplete nonrenewable resources only to the extent we invest in renewable substitutes. A **socially sustainable** system must achieve distributional equity, adequate provision of social services including health and education, gender equity and political accountability and participation. The principle of sustainable system is to protect the environment and at the same time fulfill economic and social objectives. Unsustainability occurs due to the use of resources beyond the reasonable limit set by nature, gross insufficiency in production and inequitable distribution. Unsustainable consumption and production patterns have resulted in huge economic and social costs and may endanger life on the planet. Achieving sustainable development will require global actions to deliver on the legitimate aspiration towards further economic and social progress, requiring growth and employment, and at the same time strengthening environmental protection. Sustainable development will need to be inclusive and take special care of the needs of the poorest and most vulnerable. Strategies need to be ambitious, action-oriented and collaborative, and to adapt to different levels of development. They will need to systemically change consumption and production patterns, encourage the preservation of natural endowments; reduce inequality; and strengthen economic governance. The impact of climate change threatens to escalate in the absence of adequate safeguards and there is a need to promote the integrated and sustainable management of natural resources and ecosystems and take mitigation and adaptation action in keeping with the principle of common but differentiated responsibilities.

GfK Marktforschung, (2015) interviewed 1000 German people and found out that 85% of Germans have come across the term ‘sustainability’ at some point. A total of 38% indicated that they definitely knew the term. The remaining 47%respondents stated that they were at least familiar with the term. This means that most people in Germany are aware of the topic of sustainability, while only 15% of the population stated that the concept means nothing to them.

Around 1,200 projects and events were presented during the 2015 Deutsche Aktionstage Nachhaltigkeit (German Sustainability Activity Days). In the course of one week, municipalities, private individuals, organizations and companies provided insight into what sustainability means to them. Activities took place across all regions throughout Germany. Regional awareness of the term was evenly distributed. Differences no longer exist in this respect between eastern and western Germany. Both West Germans (84%) and East Germans (86%) are familiar with the concept.

The awareness gap between men and women has also almost entirely disappeared, although men continue to appear somewhat more confident in their knowledge than women. The number of men who definitely knew what sustainability means totaled 40% while 47% had at least heard of the term. Among women, 37% said that they definitely knew the term and 46% stated that it was familiar.

Ebiquity(2015) conducted a study on consumer attitude perception and behavior around Corporate Social Responsibility(CSR). They surveyed 1000 people of 9 countries of the world USA, Canada, Brazil, U.K., Germany, France, China, India, and Japan and found out that 90% of people think that companies should operate responsibly towards social and environmental issues . Means people are aware towards sustainable development.

Both developed and developing countries should enter into a virtuous cycle of cooperation and engagement so as to ensure global sustainable development. Even after so many efforts of Government and nongovernment organizations, Campaigns and advertisements people are not aware that they should use renewable as well as nonrenewable resources economically so that we can develop an ability to meet the present as well as future generation needs and maintain a balance in the ecosystem of globe. The present study was an effort to find out the awareness of people of Indore city towards sustainable development. Title of the study is

 “  **A study of awareness towards sustainable development of people of Indore City”**

**Objectives:**

* To study the awareness of people of Indore city towards sustainable development
* To test the Normality
* To test the Homogeneity of Variance
* To compare the mean awareness scores towards sustainable development of male and female people of Indore city

**Hypothesis:**

* Awareness towards sustainable development of male and female do not deviate significantly from normality
* There is no significant difference in the variance of awareness scores of male and female
* There is no significant differencein the mean awareness scores towards sustainable development of male and female people of Indore city

**Methodology**

***Sample***

For the purpose of study awareness scale towards sustainable Development was given to 150 people of Indore city of different age group, gender, Socio Economic Status and working status. Out of which the response of 141 people could be collected. Amongst which 52 were males and 89 were females.

***Tool used for data collection***

An awareness scale towards Sustainable development was prepared by the researcher taking into account the social, economic and environmental aspects of sustainable development. This scale contained 20 statements and it was five point scale with strongly Agree, Agree, Undecided, Disagree and Strongly Disagree options. The scoring key was prepared by the researcher and the scores ranges from 20 to 100.

***Data collection procedure***

The awareness scale towards Sustainable development was randomly given to people of different age group, different socio economic status, working status and different gender. They were properly instructed that the data would be collected for the survey purpose and their identity would not be disclosed anywhere. There was no time limit for the awareness scale to complete but half an hour was given them to complete it. After completion, the awareness scale was collected back and scored as per the scoring guide prepared by the researcher. The scores ranges from 20 to 100.the scores above 60 indicated that Person’s awareness towards sustainable development and score of 60 and below showed the person is not aware towards sustainable development.

***Statistical techniques***

To study the awareness of people of Indore city towards sustainable development Mean, standard Deviation and Coefficient of variation were calculated

To compare the mean awareness scores towards sustainable development of male and female people of Indore city data were analyzed with the help of independent t test

**Data Analyses**

***Awareness towards sustainable development***

To study the awareness of people of Indore city towards sustainable development data were collected by the awareness scale and then analyzed with the help of Mean, standard Deviation and Coefficient of variation. Results are shown in Table 1

**Table 1: Mean, standard Deviation and Coefficient of variation for awareness**

 **towards sustainable development**

|  |  |  |  |
| --- | --- | --- | --- |
| **Mean** | **N** | **SD** | **CV** |
| 66.57 | 141 | 12.70 | 19.00% |

From the **table 1** it can be observed that the mean awareness scores towards sustainable development is 66.57. The scale used in the study consisted of 20 statements and each statement was rated on five point scale. Thus the minimum and maximum score that could be obtained were 20 and 100 respectively. The scores falling between 60 and 100 reflected the awareness of people towards sustainable development. Since the mean scores are 66.57 which is nearer to 70 indicates that although the people of different age group, gender, SES and working status are aware towards sustainable development but still there is need to make them more aware towards sustainable development.

**Comparison of mean awareness scores towards sustainable development of male and female people**

To compare the mean awareness scores towards sustainable development of male and female people of Indore city data were analyzed with the help of independent t test. But before applying t test the assumptions of parametric test were tested. A test of Normality and Homogeneity of variance were applied. For test of **Normality** objective was“To find out that awareness towards sustainable development of male and female is normally distributed” and Hypothesis was

“Awareness towards sustainable development of male and female do not deviate significantly from normality”. As the N ≥ 50 therefore Kolmogorov Smirnov Test of Normality was employed and results of the same are given in table 2

**Table 2 Tests of Normality**

*Summary of Kolmogorov-Smirnov test of Normality for Awareness towards sustainable*

 *Development of male and female*

|  |
| --- |
| Kolmogorov-Smirnov |
| Statistic | df | Sig. |
| Male | .111 | 52 | .158 |
| Female | .087 | 89 | .091 |

It is evident from the **table 2** that Statistical value of male and female awareness scores are .111 and .087 with df = 52 and 89 respectively whose level of significance are .158 and .091 respectively which are greater than .05 level of significance thus it can be said that null hypothesis “Awareness towards sustainable development of male and female do not deviate significantly from normality” is accepted and it can be concluded that scores are of normal distribution and it holds good the assumption of Parametric test

For the test of **Homogeneity of variance** Leven’s test of Homogeneity was employedwith the hypothesis “There is no significant difference in the variance of awarenessscores of male and female”.

**Table 3 statistics for Leven’s test of Homogeneity of variance**

|  |  |
| --- | --- |
|  | Levene's Test for Equality of Variances |
| F | Sig. |
| awareness |  Equal variances assumed |  2.86 |  .093 |

 From the **table 3** it is evident that Leven’s statistics for the awareness scores of male and female F=2.86 which is significant at .093 level of significance and it is greater than 0.05 level of significance .Thus the null hypothesis that “There is no significant difference in the awareness scores of male and female” is not rejected .Thus it can be concluded that variance of awareness across male and female is homogenous thus assumption of equality of variance holds good for this data. From the table 2 and 3 it is clear thatboth the assumptions of the parametric tests hold ,so it is justified to analyze the data with the help of parametric test thus independent sample t test was employed and the results are shown in table 4

**Independent sample t test**

**Table 4: summary of t test for awareness towards sustainable development of male and female people of Indore city**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Gender | N | Mean | SD | t | df | p |
| Awareness | Male  | 52 | 64.80 | 14.20 | 1.265 | 139 | .208 |
|  | Female | 89 | 67.60 | 11.70 |  |  |  |

From the **table 4** it is clear that t value for awareness towards sustainable development is 1.265 with df = 139for which the level of significance is .208 which is more than 0.05 level of significance, therefore it is not significant. Hence null hypothesis “There is no significant differencein the mean awareness scores towards sustainable development of male and female people of Indore city” is not rejected. Therefore, it can be concluded that awareness scores towards sustainable development of male people does no differ significantly from awareness scores towards sustainable development of female people.

**Findings:**

* People of Indore city of different age group, SES, Working status and gender are quite aware towards sustainable development
* Male and Female people of Indore city are equally aware towards sustainable development and there is no significant difference in the awareness score of male and female people.

**Conclusion:**

The result of the study shows that the mean awareness score towards sustainable development of people of Indore city is 66.57 which should be increased and there is more need to make the people aware towards sustainable development and different strategic planning should be done like protect technological resources, provide basic human needs, accommodate city development, control climate change and sustain biodiversityetc. The World Sustainable Development Summit (**WSDS**) 2016, themed, **'Beyond 2015: People, Planet & Progress'**, will be among the first international platforms to discuss the new agenda post the adoption of the Sustainable Development Goals and the signing of the Paris Agreement. The attempt will be to initiate discussions on methodologies to be adopted to chalk a path to realise the Goals beyond 2015.the WSDS will engage with leading policy- makers, corporates, researchers and members of civil society to find and promote solutions for a sustainable future. The 2016 edition of the WSDS will be hosted from October 5-8, 2016 under the broad rubric of **'Beyond 2015: People, Planet & Progress'** at the India Habitat Centre, Delhi.

Depletion of finite resources should be minimizedand overuse of resources should be avoided, pollution inequity, loss of biodiversity should be taken care of. Strategies of sustainable development aim to promote harmony among human beings and between humanity and nature.

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