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Training session a tool to promote sustainable fashion knowledge: A research study on college going girls of Jaipur city

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Abstract
Knowledge, affects a consumer's decision-making process which make their attitude positive to admit sustainable practices. The Present study was conducted purposively selected college going girls belonging to four girls' colleges of Jaipur city to impart knowledge and assess the impact of knowledge session towards eco fashion. There was a significant gain in knowledge of the respondents regarding meaning of eco fashion, roots of unsustainability, health hazards of synthetic fabrics, treatments of fabrics and 3 Rs of sustainability. The results revealed that t value was greater than tabulated value and found significant. Therefore, it can be concluded that session exposure had increased the knowledge of college going girls regarding various aspects of eco fashion. From the study it was inferred that respondents had changed their knowledge regarding various aspects of eco fashion and sustainability. The study also revealed that awareness package was highly appreciated and accepted by the respondents based on content coverage and overall presentation.

Keywords: Eco fashion, knowledge, gain in knowledge, awareness package, college going girls

Introduction
Textile is the one of the basic human need and consumers are usually not aware about the manufacturing of different types of textiles and hazards involved. They are not aware of the chemicals and bleaches used in clothes which cause extensive harm to their health and the environment. Due to the numerous options of environmentally friendly fabrics, consumers as well as the apparel manufacturers need to be educated in terms of eco fashion. It is assumed that with the knowledge of eco fashion demand for eco fashion will increase due to the development of organic fabrics. Therefore, there is a need to make consumers aware towards sustainable fashion

Material and Methods
Phase-I
In this phase knowledge, attitude and behaviour of college going girls towards eco fashion was assessed also awareness sessions were planned to impart knowledge on eco fashion. This phase was carried out in following steps:
- Locale of the study
- Sampling procedure
- Tools and techniques of data collection
- Analysis of data
- Development and evaluation of awareness package
- Pre and post knowledge assessment

Locale of the study
The present study was conducted in Jaipur city. There were two main reasons to select Jaipur as a locale. Firstly, Jaipur is a metropolitan city with variety of educational institute covering different streams like commerce, engineering, science and technology and design. Secondly Jaipur is an educational hub and student across all over India prefer to pursue their education here. Hence researcher got heterogeneous data for the present study.

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Sampling procedures
- **Selection of the sample:** The sample of the study comprised of 90 undergraduate, postgraduate, diploma, advance diploma, professional and technical courses college going girls belonging to the age group of 18-21 years and 22-25 years from different colleges of Jaipur city. Four girls colleges were selected from four zones each i.e. North, East, West and South of Jaipur city.
- **Sampling technique:** Convenient sampling method was used to collect the data.

Development and evaluation of awareness package
After assessing the knowledge and selection of trainees, an awareness package was developed to create awareness towards eco fashion among college going girls. The awareness package was developed in following steps:

1. **Gathering Subject matter:** For understanding the concept of eco fashion matter for instructional material was prepared carefully. Matter was collected through books, research papers, journal articles and magazines.
2. **Finalization of subject matter and content outline:** The content outline was finalized keeping the questionnaire in mind.
3. **Preparation of power-point and leaflet:** Based on the gathered information, power point presentations and leaflet were prepared. The key content areas recognized were as follow:

a) **Eco fashion meaning and importance**
- Meaning of eco fashion
- Need of eco fashion
- Terminology related to eco fashion
- Environmental benefits of eco fashion

b) **The roots of un-sustainability**
- Introduction to natural and synthetic fibers
- Manufacturing process and usage of natural and synthetic fibers
- Path towards sustainability; eco-friendly fibers, properties and application

c) **Synthetic fibers and its health hazards**
- Impact of synthetic fibers
- Side effects of chemicals used in manufacturing of synthetic fibers

d) **Treatments of fabrics and their impact on health and environment**
- Fabric finishes and dyes; meaning, type and impact on environment
- Impact of effluents on the environment
- Possible curative for environment
- Dyeing and printing
- Ecological dyeing process
- Environmental safety through remedial measures
- Use of animal fibers in industry

e) **A step in right direction; reduce, reuse and recycling**
  - Reduce
  - Reuse
  - Recycle

Development of booklet: To create awareness a booklet "A guide for consumers" was developed. The booklet was developed with the help of following steps:
1. **Writing script:** For preparation of booklet, subject matter was collected through various secondary sources and script was prepared in English.
2. **Collection of images:** According to the content images were collected.
3. **Evaluation of booklet through experts:** After completion of written matter and images, the developed booklet was subjected to evaluation by the panel of experts. The panel comprised of five academicians from the field of fashion and textiles. An evaluation sheet was given to the experts to rate the appropriateness of the booklet on the following criteria:
- Content converges
- Presentation style
- Easy to understand
- Organization and continuity
- Overall presentation

All the criteria were evaluated on a 3-point scale as good, average and poor with the score of 3, 2 and 1respectively. Further the comments and feedback of experts were also taken into consideration.

Sessions on knowledge of eco fashion
1. **Selection of trainees:** The respondents who had low level of knowledge were selected as trainees for awareness program.
2. **Executions of sessions:** A neat and dark room was arranged for the executions of the sessions. The power point presentation prepared for the session was shown one by one in the gap of 5 days to orient about eco fashion in selected college.
3. **Feedback:** Feedback of overall sessions was taken through a performa which was prepared to know the effectiveness of the sessions on the eco fashion. Performa's were distributed to the respondents after the sessions over and collected to analyze the data.
4. **Scoring:** The Performa had 5-point likert scale ranging from 5 (Extremely Knowledgeable) to 1 (Not at all Knowledgeable). To get the concrete result percentage was calculated. The scale contains extremely knowledgeable (5), moderately knowledgeable (4), somewhat knowledgeable (3), slightly knowledgeable (2) and not at all knowledgeable (1). Respondents were asked to rate each session by putting a tick on the option which best suits to their response.
5. **Analysis of pre and post knowledge:** After completion of all the sessions pre-knowledge and post knowledge scores of college students towards eco fashion was compared. The mean score obtained were converted into mean percentage score to get uniformity in score.
6. **Analysis of data:** The data was analyzed through mean; mean percentage score and paired-t-test.

Mean: The mean is the average of all numbers and is sometimes called the arithmetic mean. To calculate mean, add together all of the numbers in a set and then divide the sum by the total count of numbers. The mean was calculated using the following formula.

$$\text{Mean } X = \frac{\Sigma x}{N}$$

Where,
Σ = represents sum of X
X = represents scores
N = represents sample size

Mean Percent Score (MPS): Scores obtained by the

respondents in the knowledge section were converted into MPS to have uniformity in the scoring of different aspects included in the study.

$$\text{Mean} = \frac{\text{Total obtained score}}{\text{Number of respondents}}$$

$$\text{MPS} = \frac{\text{Mean}}{\text{Maximum obtainable score}}$$

Paired t-test: It was used to obtain significant difference in the knowledge of the respondent after pre and post test.

Results and Discussion
Awareness programme on eco fashion
The relevant findings of the investigation with respect to assessment of knowledge of college going girls towards eco fashion led to this conclusion that respondents had minimum and general knowledge towards eco fashion. Maximum numbers of the respondents were unaware of specific details related to eco fashion and hazardous effects of the chemicals and pollutants used in manufacturing of synthetic fibers. In view of this, the need to generate awareness among college going girls about eco fashion was felt to make them aware with importance of eco fashion, meaning and need of eco fashion, health hazards of synthetic fabrics and curatives to be taken to minimize the hazards of synthetic fabrics and use of eco-friendly alternatives for sustainable future.

Development of awareness package
Based on the findings of the study, by consulting resource persons, literature reviewed the researcher developed an awareness package on eco fashion for college going girls to minimize the health hazards of synthetic fabric and imparting awareness towards preventive measures to achieve sustainability. The awareness package consists of booklet, leaflet, videos and power point presentations. The developed package was judged by panel of experts for its usefulness.

Evaluation of developed awareness package
The booklet was shown to the panel of five experts from the field of fashion and textiles to judge the efficacy of developed awareness package using a Performa on three-point rating scale as excellent, good, and average. The main criteria of evaluation were content coverage, easy to understand,

organization and continuity, presentation style and overall presentation. Detail description is given below:

Table 1: Distribution of respondents on the basis of evaluation of awareness package N=5

Criteria	Excellent (%)	Good (%)	Average (%)
Content Coverage	60	40	-
Easy to Understand	40	40	20
Organization and Continuity	80	20	-
Presentation Style	80	20	-
Overall Presentation	60	40	-
Total	64	32	4

It can be seen from the data presented in table 1 that almost all the experts given their score between excellent to good rating criteria which emphasized that developed package was adequate and clearly developed by researcher for providing relevant information on awareness generation. Table also depicts that 64% respondents judge the package as excellent followed by good (32%) and average (4%).

Awareness Sessions
In order to generate awareness among college going girls on eco fashion, one month awareness generating sessions were organized by the researcher. The main aim of awareness sessions were to impart knowledge and change the attitude and behaviour of college going girls about eco fashion. The college going girls of four different girl's colleges of Jaipur city were approached who had low knowledge scores on eco fashion. The researcher explained the benefits of organizing the awareness sessions to the group of respondents in their respective colleges. In each college, total five sessions were held with the help of lectures, videos, power point presentations followed by interactive sessions with the respondents. The researcher shared and highlighted the information about eco fashion, roots of un-sustainability, toxic effects of synthetic fabrics, treatments of fabrics and steps to be followed to reduce, reuse, and recycle. Before and after taking all the sessions on awareness, the respondents were asked to give their feedback on the sessions on 5-point rating scale ranging from 5 (extremely knowledgeable) to 1(not at all knowledgeable). To get the concrete results percentage was calculated.

Table 2: Feedback of respondents towards sessions on eco fashion N=90

Topics of session	Level of knowledge									
	Extremely Knowledge-able		Moderately Knowledge-able		Somewhat Knowledge-able		Slightly Knowledge-able		Not at all Knowledge-able	
	f	%	f	%	F	%	f		%	
Eco Fashion: Meaning and Importance	71	79	18	20	01	1.1				
The Roots of Un-sustainability	70	78	18	20	02	2.2	-		-	
Synthetic Fibers and Health hazards	69	77	20	22.2	01	1.1	-		-	
Treatments of Fabrics and their Effect on Health & Environment	67	74.4	19	21.1	04	4.4	-		-	
A Step in Right Direction; Reduce, Reuse, Recycle	85	94.4	05	5.5	-	-	-		-	

The above table 2 shows the respondents feedback towards various sessions. The result shows that the session on reduce, reuse, and recycle scored highest percentage (94.4%) indicating that the session was extremely knowledgeable and only 5.5% respondents found the session moderately

knowledgeable. Seventy nine percent respondents found session on meaning of eco fashion and its need extremely knowledgeable, 18% moderately knowledgeable and only 1.1% somewhat knowledgeable. The session on roots of un-sustainability were found extremely knowledgeable by 78%

respondents, moderately knowledgeable and somewhat knowledgeable by 20% and 2.2% respondents respectively. The sessions on synthetic fibers and treatments of fabric score almost similar i.e. 77% and 74.4% respondents found the session extremely knowledgeable 22.2% and 21.1% found moderately knowledgeable and only 1.1 and 4.4% respondents found both the sessions somewhat knowledgeable. None of the respondent rate the sessions in the category of slightly or not at all knowledgeable.

Effect assessment of awareness sessions
Knowledge Gain
Previous knowledge scores of participating respondents were taken into consideration for gain in knowledge. Post exposure knowledge level of the respondents was also measured using the same questionnaire which was used before imparting knowledge sessions. The Performa was administered on all the 90 respondents who attended the sessions. Pre and Post test was conducted to find out the gain in knowledge. Based on the knowledge score obtained by the respondents, the mean scores were calculated. The data pertaining to pre-test and post-test knowledge of the respondents have been presented in table. Data shows the frequency and percent distribution of respondents by their knowledge in both pre and post-test on the basis of their scores obtained.

Table 3: Mean difference in pre and post knowledge of the respondents towards eco fashion N=90

Aspect	Pre knowledge score		Post knowledge score		Gain in knowledge
	Mean	Mean percent score	Mean	Mean percent score	
Knowledge towards eco fashion	9.04	45.2	13.75	68.6	23.4

The above table 3 shows the difference in knowledge of respondent before and after the session. The results reveal that the mean percent score of pre knowledge test was 45.2% which rose to 68.6% in post-test which highlights the gain in knowledge of 23.4%. The difference clearly highlights the effect of awareness sessions on the knowledge of respondents towards eco fashion.

Table 4: Gain in knowledge of the respondents towards eco fashion N=90

Aspect	Pre-test		Post-test		t-value	Sig.(2-tailed)
	Mean	SD	Mean	SD		
Knowledge towards eco fashion	9.04	.959	13.75	1.36	10.618	.000

To check whether the increase in knowledge before and after the sessions is significant or not paired t-test was applied as presented in table 4. For knowledge towards eco fashion the mean knowledge score increased from 9.04 to 13.75with the calculated t-value of 10.61. It can be conclude that mean scores of pre and post knowledge of respondents were highly significant (at 5% level of significance). The table clearly highlights that significant difference was found in the knowledge of respondents at pre and post exposure stage towards knowledge on eco fashion. The differences in the mean values of post stage data on knowledge was found higher in comparison to the mean at pre stage of the respondents. Further it can be seen from calculated t-value for

knowledge aspect that t-value exceeds the critical value depicting that means are significantly different. Similar results were found by a study done by Manocha (2011) [9]. She imparted training to rural women on clothing construction. Purposively 100 rural women were selected belonging to schedule caste and five days intense training was imparted on clothing construction aspects such as taking measurements, steps in construction and stitching of a garment. The finding shows that there was a major increase in understanding of the respondents regarding taking measurements. The study results also revealed that training exposure had increased the knowledge of rural women in all three aspects as measurements, stitching and steps in construction. Another study done by Pandey *et al*. (2017) [8] revealed that the effectiveness of vocational training programme on knowledge and adoption of value addition of fruit grains, fruits and vegetables among rural women. The results reveal that just after completion of training majority trainees (63.33%) had high level of knowledge regarding value addition followed by 36.66% respondents who had medium level of knowledge. None of trainees had low level of knowledge. Kaur (2016) [4] assessed the effect of training course on knowledge gain. The results reveal that majority of 85% respondents joined the training course to adopt mushroom cultivation as an occupation only 10.5% joined the training to get the certificate. Maximum gain in knowledge was observed for disease of mushroom, its prevention (94.1%) and variety of mushrooms (92.9%) respectively. Gulati *et al*. (2002) [3] found on impact of clothing and textiles training to rural women. Most of the respondents had favorable attitude. The overall effect of clothing and textile training was found to be high level.

Conclusion
The sessions organized for college going girls to impart knowledge on eco fashion was found to be effective in increasing the knowledge and changing the attitude and behaviour. Consequently, the developed booklet and leaflet will not only help the respondents to understand the meaning and need of eco fashion but will definitely have a wide educational appeal and will be sought out by a host of learners including families and community groups.

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