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Attitudes And Level Of Knowledge About Textile Ecology Of University Students

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Abstract

Aim: The purpose of this study is to assess attitude and behaviour of the students with regard to knowledge level of textile ecology. **Material and Method:** This study was performed on 380 university students, between the ages of 19-55. Consent received and university students was applied with face-to-face interview method. Participants consist of 267 science students and 75 social science students and 38 group 2. **Results:** Health sciences from the participants 72 % and social sciences % 90 and sciences from the participants 61 % said fabrics can be harmful to human health and the environment ($p > 0.05$). **Conclusion:** The students that we will entrust our future to them are determined their sensitivity about harmful substance in fabrics and their harmful to environment and determined they are knowledgeable about this subject. Group 2 in comparison with other parts of students about the harmful fabrics were shown to be more sensitive.

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Keywords: Textile, students, ecology, attitudes.

Introduction

The term eco-textile first appeared in USA in 1960s thanks to the studies on chemicals in order to make use of natural products (IARC 2008). Comprising ecology in textile production, human ecology as well as waste ecology, textile ecology aims not to harm environment and people in all phases of the textile production from fabric production to garment (Hatch, K.L. 1984).

Several processes are applied to textiles in all phases until the end product is obtained. We are supposed to take all phases from fabric to garment, processes applied as well as the materials and chemicals used into consideration (Grütze, J. 1996). This study aims to raise awareness among university students to whom the future is going to be

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entrusted regarding the factors that could harm people and environment during the life cycle of textiles as well as to determine their knowledge and attitudes with regards to this issue.

Material-Method

This study was performed on 380 university students, between the ages of 19-55. Consent received and university students was applied with face-to-face interview method. In this study, attitudes, behaviors and the level of knowledge of the field of textile ecology of university students were evaluated.

Statistical analysis was performed with SPSS statistical software. Results were expressed as numbers and percentages. Chi-square test was used for comparison classified independence of variables. Significance level was set at 5%.

Results

Participants is consists of 267 science students (group 1) and 38 health science students (group 2) and 75 social science students (group 3). The average of monthly income of the students are 573 Turkish money.

72% of Group 1, 90% of Group 2 and 61% of Group 3 who participated in the study have expressed that fabrics could be deleterious to health.

83% of Group 1, 95% of Group 2 and 85% of Group 3 who participated in the study have expressed that fabric dyes could be deleterious to health. 80% of Group 1, 92% of Group 2 and 65% of Group 3 who participated in the study have expressed that fabrics might cause allergic reactions.

73% of Group 1, 87% of Group 2 and 64% of Group 3 who participated in the study have expressed that the fabrics could include carcinogens. 50% of Group 1, 42% of Group 2 and 48% of Group 3 who participated in the study have expressed that they prefer organic and synthetic fabrics in their textiles. 70% of Group 1, 95% of Group 2 and 67% of Group 3 who participated in the study have expressed that cleaning agents applied to fabrics might be deleterious to health.

32% of Group 1, 42% of Group 2 and 17% of Group 3 who participated in the study have expressed that the fabrics might involve heavy metals. 39% of Group 1, 63% of Group 2 and 27% of Group 3 who participated in the study have expressed that fabrics might involve pesticides. 70% of Group 1, 92% of Group 2 and 71% of Group 3 who participated in the study have expressed that the textiles starting from fabric production to end product might harm to environment.

32% of Group 1, 16% of Group 2 and 24% of Group 3 who participated in the study have expressed that they prefer dry cleaning for their textiles.

Regarding the question through which ways could chemicals in the fabrics – if any - penetrate into human body, 56% of Group 1 answered “cutaneously”, 21% bronchially, 2% through digestion and 11% through all these three ways. 2% of the students disregarded these ways and 8% expressed that they lack the necessary knowledge about the issue. 15% of the Group 2 answered “cutaneously”, 5% bronchially, 3% through digestion and 75% through all these three ways. 2% of the students expressed that they lack the necessary knowledge about the issue. 48% of the Group 3 answered “cutaneously”, 16% bronchially, 1% through digestion and 17 % through all these three ways. 18% of the students expressed that they lack the necessary knowledge about the issue.

Regarding the question what qualities of the fabric and textile do you consider while buying textiles, 25% of Bachelor of Group 1 expressed that they consider quality of fabric, 25% “price”, 8% “color”, 10% “brand” and 32% all these qualities. 24% of Group 2 expressed that they consider quality of fabric, 20% “price”, 4% “color”, 4% “brand” and 48% all these qualities. 32% of the Group 3 expressed that they consider quality of fabric, 17% “price”, 8% “color”, 3% “brand” and 40% all these qualities. The awareness level of university students regarding the issue that fabrics might be deleterious to environment and people have been found meaningful ($p>0,05$).

Discussion

The remaining consumers also have a role in the background starting with the use of harmful chemicals in textile products’s pollution chain. In the production of apparel products contain harmful chemicals, as well as purchased and used by consumers on the human health and after washing the environmental impact of these products is inevitable.

In this study, the university students knowledge and attitudes were investigated about fabric production and use in the process of employed chemicals and other substances in the environment and human health impacts. This kind of study has not been obtained in the literature. Chemicals that may be harmful to human body may enter skin,

respiratory and digestive tract in textiles (Hatch K.L. 1984).

Science of students who participated in the survey 44%, 39% of group 2, 19% of social studies students have been indicated that chemicals that may be harmful to human body may be entered skin, respiratory and digestive tract. 70% of respondents stated that they would be harmful substances in the fabric. Dyeing of textiles used in the high amount of water and some part of harmful chemicals substances. Over 10,000 type of dye is used for dyeing or printing (Kurtoğlu N, Şenol D. 2004- Bayraktar T. 2005- IARC 1998). Chemicals used in textile products may create a health hazard (Hatch K.L.1984).

In German, skin clinical studies is shows that 2% of allergic reactions is sourced textiles. Especially disperse dyestuffs are known to cause contact allergy. What is important here is that a high degree of perspiration fastness of dyes. 49 dyes cause allergic reactions in contact (Hatch K.L. Maibach H.I. 1995).

Some azo dyes used in the dyeing of textile fibers by reducing the fragmentation can lead to allergic and carcinogenic effects (Golka K. et al. 2004- Hatch K.L. 1984). 70% of university students who participated in this study have expressed that fabrics could because allergic reactions. 90% of participants have expressed that fabrics could be create carcinogenic effects.

Human Ecology means to not damage to body with way of respiration, digestion or perspiration by clothes as called second skin and materials that are touched skin. Purpose of human ecology is detected nervous value of harmful substance for body healthy with considering kind of textile and it means after result of analyses, are there any harmful substance, what is amount.

Conclusion

Disruption of ecological balance affects environment and human health. Fabric production, materials used for production cause deterioration of ecological balance. In this study, it has been identified that many university students are aware of the harmful effects of fabric production and materials used for production. It has been determined that the students who will be our future are aware of the harmful substance in fabrics and their harm to environment and they are knowledgeable about this subject. Making analysis for chemicals and other substances in fabrics is very important and more researches are necessary in this subject.

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