

To study the impact of age of employees on satisfaction with noise levels in their office environment

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Abstract

Noise is probably the most prevalent annoyance source in offices, and can lead to increased stress for occupants. However, indoor environments deemed satisfactory by a certain occupant group may not be satisfactory to another. Building occupants often react in noticeably different ways under the same indoor environment, leading to a presumption that various socio demographic variables beyond environmental parameters influence occupants' perception of the quality of indoor environment. Present study aimed to study the impact of age of employees on satisfaction with noise levels in their office environment. A total of 660 employees from various offices of Chandigarh were recruited as sample. The age range of the sample was between 25 to 60 years. In the present study sample was divided into three age groups Group I (25 to 34yr) consisted of 266 employees, Group II (35 to 49yr) consisted of 263 employees, and Group III (50 to 60yr) consisted of 131 employees. The questionnaire was adapted and modified version of already existing scales of occupants' satisfaction with indoor environment quality (IEQ) components of other buildings by different researchers. Findings of present study are in consensus with the previous research. Older respondents were found to be more satisfied with dwellings than younger ones. As employees become older, they may be less likely to struggle to resist or control and becomes more tolerant and accommodating to ones office environment.

Keywords: *environment, age, perceived satisfaction, correlate, Design, Built environment*

1. Introduction

Working conditions in the office are gaining attention, both in regards of the interaction of the office worker with the psycho-social environment and of the built environment, out of which sound is an important characteristic. The effects of noise on people are varied. Noise disrupts activity, disturbs sleep and hinders people carrying out their work. It can impede the learning process, psychological development, social activity and verbal communication, and impairs job performance and safety in the workplace [7]. Sundstrom et al. reported that noise is probably the most prevalent annoyance source in offices, and can lead to increased stress for occupants[9]. However, indoor environments deemed satisfactory by a certain occupant group may not be satisfactory to another. Building occupants often react in noticeably different ways under the same indoor environment, leading to a presumption that various socio demographic variables beyond environmental parameters influence occupants' perception of the quality of indoor environment. Present study aimed to study the impact of age of employees on satisfaction with noise levels in their office environment .

2. Methodology

Sample

A total of 660 employees from various offices of Chandigarh were recruited as sample. The age range of the sample was between 25 to 60 years. The employees who were working for the last three years in a particular organization were considered for inclusion in this study. The minimum educational qualification of the selected subjects was graduation. In the present study sample was divided into three age groups Group I (25 to 34yr) consisted of 266 employees, Group II (35 to 49yr) consisted of 263 employees, and Group III (50 to 60yr) consisted of 131 employees.

Questionnaire

The data collection instrument for this study was a structured questionnaire developed by the researcher with the help of experts. The questionnaire is adapted and modified version of already existing scales of occupants' satisfaction with indoor environment quality (IEQ) components of other buildings by different researchers. The questionnaire items were developed to reflect the satisfaction/comfort/productivity components of the office environment. The questionnaire for the study contained 44 total items pertaining to employees' general demographics and satisfaction with thermal, acoustic, and lighting conditions. The items of the questionnaire were related to the occupants' satisfaction of the IEQ components of thermal, acoustic, and lighting conditions. They were rated by the occupants based on a five-point Likert-type scale (1= "very dissatisfied" to 5 = "very satisfied").

Data analysis

For result findings and in-depth analysis of the different components of office environment on the productivity of the office employees, statistical techniques of t test has been used. SPSS 16 software as research tool for data analysis was used for this research.

3. Results and Discussion

Table 1: Satisfaction with Noise in Office

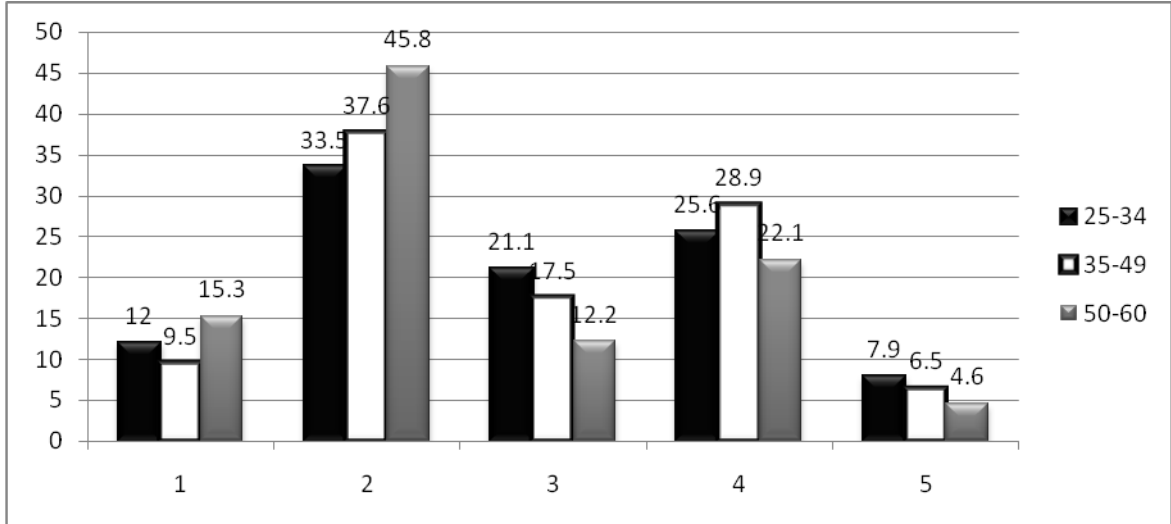
Question	Response(%)		
	25-34 years	35-49 years	50-60 years
Work environment is quiet	54.6	52.9	38.9
Able to have quiet and undisturbed time alone	47	42.9	32.1
Workspace has many noise distractions	33.8	41.4	35.9
Noise free environment will increase my productivity	89.8	91.3	88.5

54.6% 25-34 years age, 52.9% 35-49 years age, 38.9% 50-60 years age group employees had quiet work environment, 47% 25-34 years age, 42.9% 35-49 years age, 32.1% 50-60 years age group employees had quiet and undisturbed time alone in their workplace, 33.8% 25-34 years age, 41.4% 35-49 years age, 35.9% 50-60 years age group employees had many noise distractions at workspace,

89.8% 25-34 years age , 91.3% 35-49 years age, 88.5% 50-60 years age group employees agreed that Noise conditions at work affects their productivity

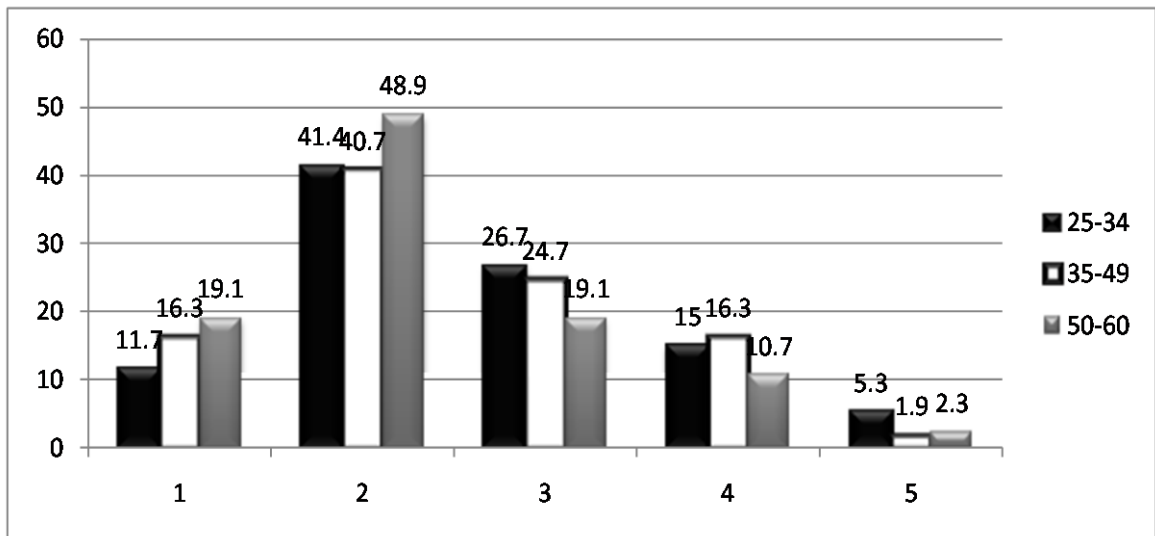
1 Work environment is quiet

Not at all, To some extent, Often, Mostly, Always



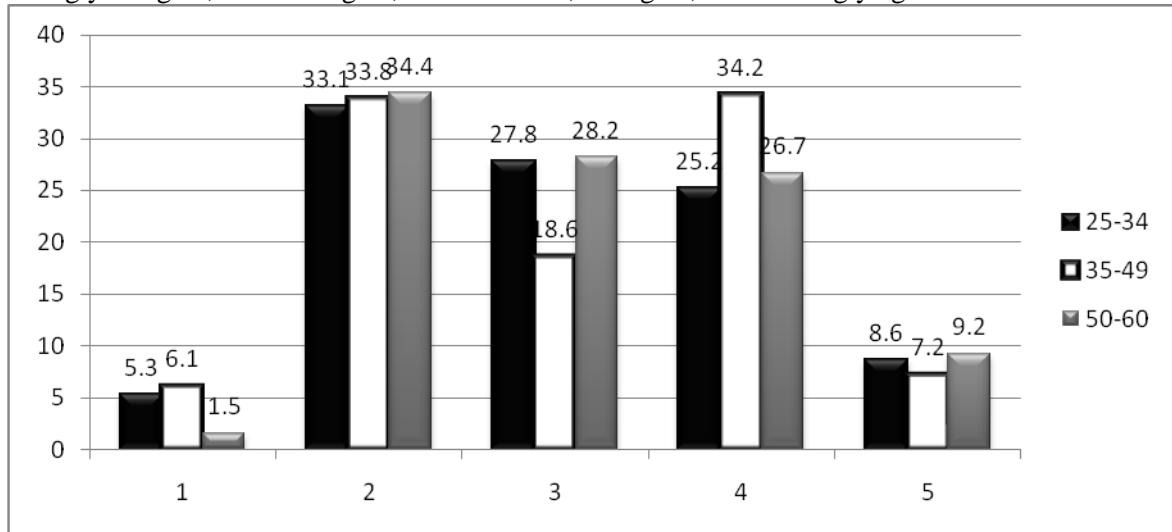
2 Able to have quiet and undisturbed time alone

Not at all, To some extent, Often, Mostly, Always



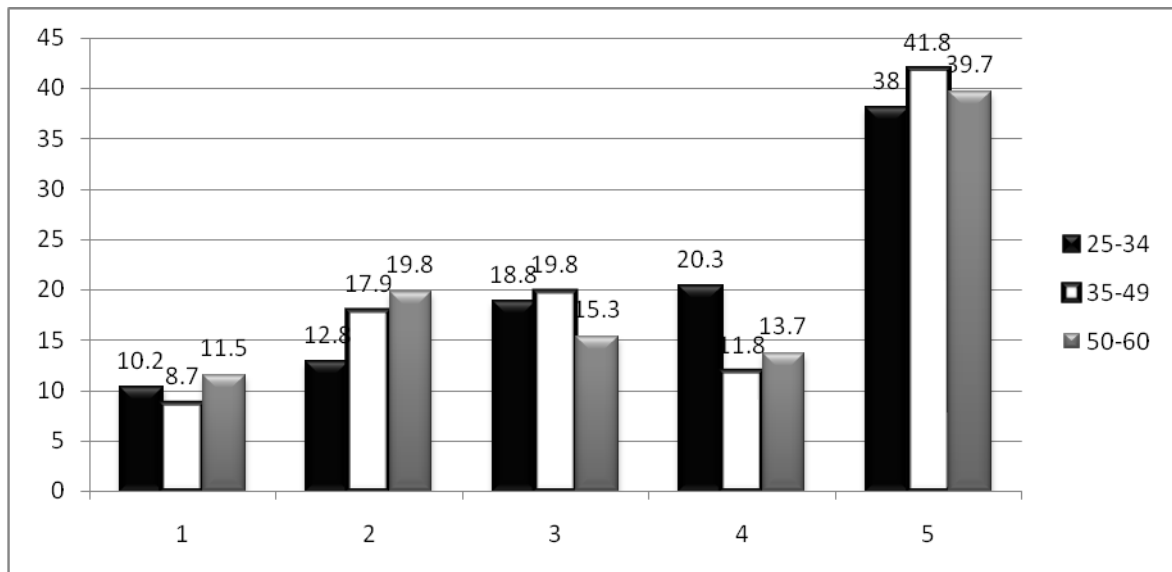
3 Workspace has many noise distractions

strongly disagree, disagree, neutral, agree, strongly agree



4 Noise free environment will increase my productivity

Not at all, 20%, 30%, 40%, 50% or more



Findings of present study are in consensus with the previous research. Older respondents were found to be more satisfied with dwellings than younger ones [3][5][2]. Age was also found to be significant and one of the more powerful predictors in investigations of the relationship between traffic noise exposure and self-reported health status [1]. As employees become older, they may be less likely to struggle to resist or control and becomes more tolerant and accommodating to ones office environment.

Western research also supports importance of noise levels in offices. Sundstrom et al. (1994) reported that noise is probably the most prevalent annoyance source in offices, and can lead to increased stress for occupants. Quible points out that excessive noise can affect employees psychologically due to an increase of blood pressure and metabolic rate, which in turn can decrease their productivity[8]. Improving the office sound can lead to increase in employee productivity[6]. According to Dyna sound

Collaborative Studies of five major corporations, noise contributes the biggest proportion on the office environment distractions at 71% [4]

4. Conclusion

It can be concluded that building occupants often react in noticeably different ways under the same indoor environment, leading to a presumption that various socio demographic variables like age are beyond environmental parameters and influence occupants' perception of the quality of indoor environment.

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