



WWJMRD 2021; 7(10): 67-69  
www.wwjmr.com  
International Journal  
Peer Reviewed Journal  
Refereed Journal  
Indexed Journal  
Impact Factor SJIF 2017:  
5.182 2018: 5.51, (ISI) 2020-  
2021: 1.361  
E-ISSN: 2454-6615  
DOI: 10.17605/OSF.IO/H6VER

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## The Effect of Crowding and Perceived Control on Task Performance among College Students.

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### Abstract

The aim of the present study is to determine the effect of crowding and perceived control on task performance among college students of commerce stream. A total sample of 72 students from commerce stream were selected for the study. To collect the data, Crowding Experience Scale, Perceived Control at School Scale and Clerical Speed and Accuracy tests were administered. The obtained results were analysed using correlation and 't' test. The results reveal that crowding has had no bearing on the performance of the subjects. However, inducing perceived control (decisional control) has led to the enhancement in task performance.

**Keywords:** Crowding, Perceived Control, Task Performance

### Introduction

Environmental psychology is an interdisciplinary field focused on the interplay between humans and their surroundings. Environmental stressor is a term used in the field of psychology. It refers to any force or event in the human or natural environment that may cause a person to experience stress. Some examples of environmental stressors include noise, air pollution, crowding, traffic congestion, natural disasters and extremes of temperature. Studies on the effect of different environmental stressors on people indicate that they can impact people's behavior, mood, cognitive function, physical health and/or psychological well-being. Baum, A., & Paulus, B.P. (1987).

### Crowding

The important variable considered in the present study is crowding. One potential source of stress is crowding. Environmental psychologists distinguish between the physical measurement of density and the psychological feeling of crowding. Density is defined as the physical area available to the given number of individuals present, while crowding is the psychological feeling of not having enough space available.

Crowding refers to the organization of space, its purposes, uses and the user's perception of it, and generally connotes both a limitation of physical and psychological freedom.

Crowding, refers to the micro-environment and assumes that too many people in too small or restricted an environment will engender negative consequences. Bell, P.A., Fisher, D.J., Baum, A., Creene, T.C. (1996).

Crowding is both an objectively measurable condition and a subjective experience. The objective measure is density. Crowding is a subjective experience; in that it relates to how a person feels in specific density situations. People feel crowded when their ability to control interaction with other people is affected or when other people interfere with their ability to conduct an activity such as reading, conversing.

### Perceived Control

Perceived control refers to an individual's belief about his or her own capability of exerting influence on internal states and behaviors, as well as one's external environment. Crowding has been described as a reaction to a perceived loss of control over the environment caused by density (Baron & Rodin, 1978).

**Task Performance**

Task performance is a generic term for how a person does on a given task. For instance, task performance is sometimes measured as response time (how long a person takes to respond to a given, timed or untimed stimulus) or it could be measured as accuracy.

**Methodology**

**Problem:**

To determine the effect of crowding and perceived control on task performance among college students.

**Objectives**

1. To study the influence of crowding on the task performance of college students.
2. To study the influence of inducing perceived control, on the performance of students.

**Hypothesis**

1. Crowding hinders task performance.
2. Induced perceived control enhances task performance.

**Variables**

Independent variable: Crowding, Perceived Control

Dependent Variable: Task performance

**Operational Definitions:**

Crowding: Refers to subjective experience of interference in an individual's ability to conduct tasks.

Perceived control: The extent to which an individual has decisional control.

Task performance: The speed and accuracy with which the individual is able to perform a given task.

**Materials**

1. Crowding Experience Scale (CES) developed by Paul. B. Paulus.  
It consists of 28 items. Higher the score, greater the experience of crowding.
2. Perceived Control at School Scale (PCSS) developed by Adelman, Douglas, Nelson, Taylor and Phares. It consists of 16 items.

3. Clerical Speed and Accuracy (CSA), a subtest of Differential Aptitude Test, the Indian adaptation developed by J.M. Ojha.

**Sample**

Purposive random sampling was adopted. Sample consisted of degree college students of commerce stream. All the subjects were in the age group of 18- 20 years.

**Inclusion Criteria**

1. All the subjects were college students of commerce stream.
2. Subjects were in the age group of 18-20 years

**Exclusion Criteria:**

College students of arts and science stream.

**Research Design**

Between group research design

**Procedure**

A total sample of 72 students from commerce stream were selected for the study. Informed consent of the respondents was obtained, and then Demographic details were collected by using a semi-structured questionnaire.

Crowding Experience Scale, Perceived Control at School Scale and Clerical speed and accuracy tests were administered. Based on the PCSS scores, subjects were divided into experimental and control groups. Those who scored low on the PCSS were assigned to the experimental group and those who scored high were assigned to the control group. The subjects were administered the clerical speed and accuracy test. After completion of part 1 of the test, the experimental group was given the choice to work on part 2 anywhere outside the classroom if they wished to. These instructions were given exclusively to the experimental group so as to induce a sense of control (decisional control) in them. Later, part 2 was administered to both the groups. Finally, both the groups had to respond to the crowding experience scale.

**Results and Discussion**

**Table 1:** Mean CES score and mean performance of Control group and experimental groups on CSA

Mean CES score	Mean performance on part 2 of Clerical speed and accuracy	Percentile point	Interpretation	Correlation coefficient between CES and Part 2 CSA scores
Control group	63.47	50	Average	-0.08
79.63				
Experimental group	77.36	90	Excellent	-0.24
81.16				

The commerce stream, control group have experienced a moderate degree of crowding and have shown an average performance on the test of clerical speed and accuracy. The correlation between crowding and task performance is found to be negligible ( $r=-0.08$ ).

The experimental group of the commerce stream have also

experienced a moderate degree of crowding and have shown an excellent performance on the test of clerical speed accuracy. The correlation between crowding and task performance is found to be very slight ( $r = -0.24$ ). Crowding has low bearing on task performance in the commerce group. Paulus., Mathews. (1980).

**Table 2:** Mean improvement scores of the Control group and Experimental group (Commerce Stream) on CSA

Mean Improvement Scores (Part 2 CSA CSA) of Control group.	Mean Improvement Scores (Part 2 CSA-Part CSA) of Experimental group.	't' test
2.72	14.33	6.16**

In the commerce stream, the improvement score of the control group is 2.72 and the improvement score of the experimental group is 14.33. Greater improvement scores are seen in the experimental group. Significant difference in performance is seen between the control group and experimental group ('t' test = 6.16). Inducing perceived control (decisional control), has enhanced task performance. Pandey, J., Meera, V., Ruback, B. (2000).

### Conclusions

1. Crowding has not hindered task performance.
2. Inducing perceived control (decisional control) has enhanced performance.

### References

1. Baron, R.A., & Rodin, J. Residential density, locus of control and crowding perception in popular housing projects. *Journal of Environmental Psychology*. Vol 7, Issue 2, June 1987, Pages 143-158
2. Baum, A., & Davis, E.G. (1980). Reducing the stress of high density living; an architectural intervention. *Journal of Personality and Social Psychology*, Vol 38, Page 471-481.
3. Baum, A., & Paulus, B.P. (1987). Crowding in D. Stokols and I. Altman (Eds). *Handbook of Environmental Psychology*, Vol 1, Page 533-570. New York: Wiley.
4. Bell, P.A., Fisher, D.J., Baum, A., Creene, T.C. (1996). *Environmental Psychology*, New York: Harcourt Brace College Publishers.
5. Kothari, C.R., *Research Methodology: Methods and Techniques* (Revised Second Edition) New Age International Publishers (2004)
6. Pandey, J., Meera, V., Ruback, B. (2000). Perceived crowding in Indian Classroom: The effects of Age, Gender and Household Density. *Psychology and Developing Societies*, Vol 12, Page 139.
7. Paulus, P.B., & Matthews, R. (1980). Crowding attribution and task performance. *Basic and Applied Social Psychology*, Vol 1, Page 3-14.
8. Paulus, P.B., & Matthews, R. (1980). When density affects task performance. *Personality and Social Psychology Bulletin*, Vol 6, Page 119.