
IMPACT OF PROSOCIAL BEHAVIOR ON ATTITUDE TOWARDS AIR POLLUTION

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Abstract

The present study focuses on Prosocial Behavior and Attitude towards Air Pollution of people driving two wheelers (50), four wheelers (50) and smokers (50). These people were living in the various areas of Coimbatore. The regression analysis is used to determine the influence of Prosocial Behavior on the Attitude towards Air Pollution. The conclusions are arrived based on the findings.

Introduction

The environmental psychologists who studied the effects of various physical environmental conditions on the behavior of the people brought into their fold the various physical components like ecology, noise, atmospheric conditions like the air, temperature and some unusual environmental conditions. Air is an important physical component, which has much effect upon the behavior of all living organisms. People can reduce the air pollution, if only they know that air pollution

causes severe health and behavior problems.

Studies on air pollution and its impact on behavior are not many as it is very difficult to study experimentally. Therefore instead of conducting experiments on air pollution, observations of the events of air pollution that are taking place in various situations might provide us with much better information. The consequences of air pollution in thickly populated urban area could provide us with valuable results. People suffer from various kinds of lung diseases like

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tuberculosis, asthma, gastrointestinal diseases and several other behavioral disorders due to air pollutions.

Prosocial Behavior refers to “voluntary actions that are intended to help or benefit another individual or group of individuals” (Eisenberg and Mussen, 1989). This definition refers to consequences of a doer’s actions rather than motivations behind those actions.

These behaviors include a broad range of activities: sharing, comforting, rescuing and helping. A familiar example of Prosocial Behavior is when an individual makes an anonymous donation—a prosocial action.

Prosocial Behavior refers to helping which, in turn, means understanding the needs of recipient’s interests. Prosocial Behavior occurs when someone acts to help another person, particularly when they have no goals other than to help a fellow human. Since the early 1970’s a number of scholars have studied Prosocial Behavior.

Clary and Snyder (1990) conducted an important study on the factors motivating an individual to volunteer. They found that volunteers were motivated by both altruistic and egoistic considerations.

Ostrove, Crick and Keating (2005) conducted a study on Gender-biased Perceptions of Preschoolers Behaviors: How much is aggression and prosocial behavior in the eye of the beholder?. The study investigated the perception of male and female subjects. Findings revealed that men were not as accurate as women in identifying relational aggression and prosocial behavior.

Gardner, Powell, and George (2007) studied determinants of aggressive and prosocial behavior among Jamaican schoolboys. The result shows that aggressive boys reported significantly more involvement in fights than the prosocial boys

Attitudes are defined as evaluations of entities, including behavior, that result in perceptions of favor or disfavor (Eagly and Chaiken, 1993). Consequently, attitudes may predispose individuals to adopt or reject specific health-related behaviors. Most people constantly evaluate various aspects of their environment. This process is often behavioral in its focus Attitudes are formed as a result of this ongoing evaluative process. The relationship between attitudes and behavior is complex, and understanding how attitudes

influence behavior may be enhanced by the use of a theoretical framework. Attitudes are not directly observable but are inferred from the objective, evaluative responses a person makes.

The attitude towards pollution falls into three categories:

- Ignorance (I don't cause any pollution)
- Enlightened (there is potential that my activity will pollute so I must take precautions)
- Irresponsible (I probably will pollute but I will try to avoid detection)

Everybody is responsible for complying with environmental regulation (both ethically and legally) and for preventing pollution of land, water and air. Nevertheless, thousands of incidents occur each year in industry, businesses, farming/agriculture, transportation and domestic properties. We all know that each offence results in damage to the environment, but some are still unaware that it can also result in prosecution. As the majority of these incidents are avoidable, it makes sense to take some simple precautionary steps to prevent any pollution occurring in the first instance. This can be done with a little effort by:

- simple review of the operations
- identification of potential pollution hot spots
- careful planning of procedures
- adequate training
- provision of equipment to reduce the effect of any accidental occurrence
- waste management

These are very simple, straightforward points of action that should be carried out during the normal procedural functioning of any responsible organization. It will be seen that this list divides into two distinct segments. Firstly there is the process review to reduce or eliminate the possibility of a pollution event, and secondly there is the resultant output emanating from the operation or process thus producing waste, which itself is a pollutant.

Gray, Kasteler and Geertsen (2005) conducted research on public attitudes toward air pollution as a motivational factor in taking action. The major task in any community is to stimulate public acceptance of the responsibility to take some kind of action. This study was conducted to investigate the attitudes of a metropolitan population toward air pollution and to measure in a crude way the

public's willingness to take action. Data were collected by personal interview from 562 adult respondents living in Salt Lake City, Utah, which is surrounded by lofty mountains. High-pressure areas frequently form an inversion, which holds the air on the valley floor. The air quickly becomes polluted as it cannot escape.

A health behavior model, formulated by Irwin Rosenstock, was used as a frame of reference in determining how residents perceive the pollution problem and its probable consequences in relation to their health. Willingness to donate money from one's own resources in an effort to reduce the problem was used as a measure of concern. Those most willing to donate money to combat air pollution were residents who perceived air pollution to be a serious problem in this community; who were personally bothered by it; who were concerned for their family's health, and who had confidence that the problem could be eliminated, or at least reduced by our technical expertise. The findings of this study suggest the potential usefulness of the model in

designing community programs to reduce air pollution.

Methodology

Objective

The study was conducted to see the effect of Prosocial Behavior on Attitude towards Air Pollution.

Hypothesis

There will be no effect of Prosocial Behavior on Attitude towards Air Pollution.

Sample

The sample consisted of 50 smokers, 50 two-wheeler users, 50 four-wheeler users who are living in the various areas of Coimbatore.

Tools

Prosocial Behavior Questionnaire (Chaitanya and Tripathi, 2001) and Attitude towards Air Pollution (Rajamanickam, 1999) were used to collect the data.

Analysis of Data

The data was subjected to Mean, Standard Deviation and Regression.

Discussion

The effect of Prosocial Behavior and Attitude towards Air

Table-1: Model Summary

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.313	.098	.092	16.90309

Pollution was found using regression

The result indicates that

- The correlation coefficient between the two variables is .313
- The coefficient of determination for the sample is 9.8%
- The estimated coefficient of determination for the population is 9.2%

The F value 16.101 can be used to test the null hypothesis. As the significance level associated with the observed value of F is 0.01, the null hypothesis is rejected. Although 9.8% of the variance was accounted for by Prosocial Behavior, this percentage was statistically significant.

In table 3, the intercept A is

termed as the constant and has the value 64.544. The slope of the line B has the value .313. The column headed 'std. error' of the intercept and slope values. If the intercept and slope values are divided by their respective standard errors the values displayed in the column headed "t" will be produced. For example .313 divided by .556 results in 4.013. The t value is used to test the hypothesis. As the associated probability of 0.00 shown in the column headed significant is lesser than the 0.01 the null hypothesis can be rejected. In the same way this t test is used to test the null hypothesis that the value of intercept is zero in the population. As 64.544 divided by 9.091 results in a t value of 7.100, which has an associated probability

Table-2: ANOVA

<i>Model</i>	<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Regression	4600.271	1	4600.271	16.101	.000
Residual	42285.729	148	285.714		
Total	46886.000	149			

Table-3: Coefficients

<i>Model</i>	<i>Un-standardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	<i>Sig.</i>
	<i>A</i>	<i>Std. Error</i>	<i>Beta</i>		
(Constant)	64.544	9.091		7.100	.000
Prosocial Behavior	.556	.139	.313	4.013	.000

of 0.104, so once again the null hypothesis is rejected. As a result the following regression equation is arrived

$$\text{Attitude towards air pollution} = 64.544 + (.556 \times \text{Prosocial Behavior})$$

The results also indicate that there is a significant effect of Prosocial Behavior on Attitude towards Air Pollution. It clearly implies that each and every individual is enlightened towards the awareness of air pollution by their Prosocial Behavioral characteristics like altruism -the behavior that is directly and intentionally aimed at helping specific individual or group of individuals who are affected by air pollution. Civic sense -the behavior that is designed to increase one's participation in and support of unit as a whole to protect environment. Courtesy -taking actions to prevent environmental problems from occurring by respecting others needs. Conscientiousness -carrying out the role behavior such as switching off engines when not required, well beyond the minimum required level. Sportsmanship – behaviors, which are involved when a person accepts minor frustrations without complaint, when others pollute much. Perception towards environment -any discretionary actions that are not recognized by



formal reward from the society. Thus Prosocial Behavior certainly has a significant effect on the attitude towards air pollution.

Conclusion

Prosocial Behaviors such as Altruism, Civic Sense, Courtesy, Sportsmanship Conscientiousness- and Perception towards Environment, play a significant role in forming a positive attitude towards decreasing the air pollution.

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