Disorder and Negative Attitudes

How much do our physical surroundings affect our attitudes toward others? For years sociologists, psychologists, and political scientists have known that signs of disorder and chaos in neighborhoods and communities increase lawlessness and lead to more disorder. Such research has led to public efforts to clean up graffiti, trash, and run-down buildings as a way to fight crime. But how does a disorderly environment affect people in general? A recent series of studies by researchers in The Netherlands suggests that environmental disorder promotes stereotyping and even discrimination against minority groups.

In Study #1 people were interviewed in a busy train station in Utrecht during a strike by the janitors. The station had not been cleaned for many days and was becoming rather seedy. The researchers stopped passersby in the station and asked them to complete a brief questionnaire about the character traits of three groups: Muslims, homosexuals, and the Dutch. Those who agreed to the study were directed to a line of chairs where they could fill out the questionnaire. One of the chairs was occupied either by a white Dutch person or a black Dutch person. Once the strike was over and the train station cleaned up, the same experiment was repeated with different passersby. **Results**: Respondents in the dirty train station endorsed more stereotyped character traits for the three groups than did respondents in the clean train station. Furthermore, they tended to sit farther away from the non-white person when the train station was dirty than when it was clean.

Study #2 was conducted in an affluent neighborhood. Passersby were given the same character trait questionnaire as in Study #1, but for half of them the neighborhood was altered to look disorderly (some tiles were pulled out of the sidewalk, a car was parked half on the sidewalk, an abandoned looking bicycle was lying nearby). After completing the character survey, each respondent was also asked to contribute to a "Money for Minorities" fund. **Results**: As before, respondents in the disorderly environment made more stereotyped judgments of the minorities and were less inclined to give money to the Minorities Fund.

Study #3 was conducted with college students in a laboratory and was designed to test whether some "need for order" underlies stereotyping. Forty-seven students were shown either pictures of disorderly environments (e.g., "a bookcase with chaotically stacked books"), orderly scenes (bookcase with neatly shelved books), or neutral pictures, and then asked to complete the same character trait questionnaire used in the previous studies, plus a "need for structure" scale, with items like "I need structure" and "I don't like situations that are uncertain." **Results**. Stereotyping and need for structure were highly correlated, and both were higher for students who had looked at photos of disorder than for those who looked at the other photos.

Study #4 involved a vigilance task requiring 57 students to keep their eyes fixed on a point on a screen while a series of words were flashed to the periphery so quickly the subjects had no conscious awareness of them. One group was exposed to words associated with disorder (e.g., "chaos, anarchy, mess"), one group to words associated with order (e.g., "structure, clarity, neat"), and one group to neutral words. **Results**:

Those students exposed to the disorder words scored higher on the measure of stereotyping and the need for structure scale, and the two measures were highly correlated.

Finally, Study #5 presented 66 students each with a page of abstract symbols either chaotically placed or neatly arranged on a sheet of paper, followed by the same character trait survey and need for structure questionnaire. **Results**. Students exposed to the disorderly abstract patterns scored higher on stereotyping and need for structure than did students exposed to the neatly arranged symbols.

So what's going on here? The authors conclude that disorder creates a need for order, which leads to stereotyping groups in general and discriminating against groups that aren't like us as a way to regain some sense of order. They found differences in attitudes about minorities not only when the respondents took the questionnaires in a disorderly environment but even when they were merely exposed to disorderly words, pictures, and shapes! While such brief exposures may not be powerful enough to create lasting attitudes, the fact that such effects could be measured at all is pretty interesting and leads to other questions. For example, if someone had to live in a disorderly environment for very long, would it lead to more lasting changes in attitudes? What about people who grow up in a disorderly environment – would they experience the same need for order as those who were used to order? In other words, is it the disorder itself or the noticeable change from order to disorder that causes the effect? If so, just how noticeable would it have to be to affect attitude and behavior? What if just one thing was out of place? Also, what if the passersby were offered some way to respond to the disorder, such as tidying up the room or aligning the symbols neatly on the page? Would their tendency to stereotype others be lessened? And what about minority groups themselves – would they also be more inclined to stereotype groups in a disorderly environment?

This research is similar to other studies demonstrating the psychological effects of our surroundings on our daily lives. Recall the What's New in Psychology article "Fast Food and Impatience," where people were found to hurry up and be more impatient in the presence of fast food logos. Together these studies suggest that our local environments can affect our thinking and actions in ways so subtle we may not be aware of them. With these studies in mind, it might be interesting to think of ways your surroundings influence you as you go through your day.

Stapel, D.A. and Lindenberg, S. (2011) Coping with chaos: How disordered contexts promote stereotyping and discrimination. *Science*, Vol. 332, Pages 251 – 253.