
The Effects of Social Norms on Male Hygiene

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ABSTRACT -Numerous studies have found that individuals are more likely to comply with social norms when in the presence of others. To test the hypothesis that restroom hygiene norms would be influenced by the presence or absence of others, 93 male participants were observed in a restroom to see if there were any differences in their hand-washing behavior when someone else versus no one else was present. While 90% of the men washed their hands while in the presence of others, only 44% did so when alone; thus, the evidence supported our hypothesis. The implications of these results are discussed.

Social norms are defined as rules for accepted and expected behavior. Norms prescribe proper behavior, and also describe what most others do, or what is normal (Myers, 2002). Some norms are universal, whereas others vary by culture. What is seen as normal is defined by the society in which one lives in and is accustomed to. For example, Aarts and Dijksterhuis (2003) surveyed 62 undergraduate participants and asking questions related to how people behave in a well-mannered (exclusive) restaurant, and found that environment can directly influence normative behavior. Specifically, they found that when one is in an exclusive restaurant, people tend to behave in a well-mannered way compared to when in a non-exclusive restaurant. Bendor and Swistak (2001) found that social norms are derived from many principles of rationality that people continue to use, and therefore become routine for everyone; they did this by showing that successful strategies to game theories become routine while unsuccessful strategies become obsolete.

The presence of others, in everyday situations, affects conformity. Conformity is defined as the way a person displays a particular behavior or belief because it is consistent based on norms, positions, or standards of their group members who make up one type of influence on this individual (Nail, MacDonald, & Levy, 2000). Kindleberger (2000) argued that social behavior stems from societal pressures to conform to norms. Individuals may feel the need to perform such

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actions so that other members of their culture see them as normal. Individuals tend to interact with others who share the same norms as they do (McElreath, Boyd, & Richerson, 2003). This conformity behavior is important because if individuals do not share the same norms as those they interact with, they will probably be looked upon as being different (e.g., strange, weird), and perhaps not as someone with whom the person should keep interacting.

If individuals do not agree with a norm or feel that a norm does not apply to them, they may choose to violate the norm. However, fear of social repercussions (e.g., being different) after violating a norm may lead those individuals to comply with the norm. This fear may lead an individual to imitate another's behavior for the sake of not being perceived as going against the norm. For individuals to be perceived as different by people unfamiliar to them can be somewhat embarrassing (Costa, Dinsbach, Manstead, & Bitti, 2001). Levine and Anders (2000) explored the violation of what is expected of individuals by society and its norms. When Levine and Anders compared unexpected abnormal behavior to expected normal behavior, each model predicted the same thing: unexpected abnormal behavior was rated as more deceptive than expected normative behavior. Thus, people base their judgments of others on what they perceive as being right from others in their society.

People frequently imitate the actions of observed models (Bandura, 1977). Role modeling behavior can be found throughout society, in both children and adults. Bandura also stated that things happen based on the influence of what other people do. In order to learn, individuals may imitate other behaviors. Bandura's research has shown that modeling is an effective learning process for both children and adults in society. Aarts and Dijksterhuis (2003) found that if participants were exposed to pictures of the environment, there was a strong association between the environment and normative behavior. "When situational norms are well-established, an environment is capable of automatically activating mental representations of normative behavior and the behavior itself" (Aarts & Dijksterhuis, 2003, p. 18). When the participants in this study were given pictures of different environments to look at, they based their responses of how they would behave in each of the environments on situational norms.

We focused our study on the issue of male hygiene in relation to social norms. Good hygiene is thought to be proper or expected behavior of most people, and specifically recommended by the Center for Disease Control and Prevention after using the restroom (CDC, 2004). Male hygiene, for example, may be indicated by whether or not males wash their hands after going to the restroom. Most people have been taught that washing one's hands after using the restroom is the proper thing to do; in work settings, this may also be legally required. Thus, our hypothesis is that in the presence of others, an individual will be more likely to wash his hands after using the restroom than an individual who is alone.

Method

Participants

Participants were 93 males who were observed in a men's restroom in this experiment. Participants were men with apparent ages ranging from approximately 21 to 60. Since this was a naturalistic observation and ages were not recorded, no exact ages are known; however, the location excluded participants younger than 21. Based on estimates of ages, the mean age was about 32. The participants comprised a diverse mix of individuals of Caucasian, African-American, Hispanic, and Asian descent. As with age, ethnicity was not recorded; based upon the experimenter's observations, approximately 50% of the participants were Caucasians, approximately 30% were African-American, approximately 15% were Hispanic, and approximately 5% were Asian.

Apparatus

The experiment took place in a riverboat casino employee men's room that was also used as the employee locker room. With the exception of the standard facilities of a men's restroom, (e.g., sinks, urinals, toilets), the only experimental material utilized was an "out of order" sign on one bathroom stall that was used to help hide the experimenter, in the control condition, to give the illusion that the participants were alone in the restroom.

Procedure

The men's restroom experienced a moderate amount of traffic while the experiment took place. The experiment ran over the course of two weeks. Data were recorded at twenty-minute intervals every hour during a ten-hour work schedule. To control for extraneous variables, the data for the experiment were recorded during the same time frame each night.

The experimenter inconspicuously recorded participants' behavior from a far bathroom stall. Data were recorded when only one person (besides the experimenter) occupied the restroom. In the control condition, an "out of order" sign was placed on the door to the far bathroom stall to give participants the impression that there was no one else in the restroom, and to conceal his presence. Following each participant's completion of micturation, the researcher recorded whether or not the participant washed his hands after finishing using the urinal. As the experimenter could not directly observe the participant, hand washing was determined by listening for the running of water in the sink. Data for the control group were recorded only when the participant was the only person in the restroom aside from the hidden researcher. The experimental condition was identical to the control condition, except that the experimenter's presence was known to the participant. When a participant in this condition finished using the restroom, the experimenter was washing his hands. To the participant, it appeared that the experimenter confederate had just finished using the urinal. Data were then recorded as to whether or not the participant washed his hands. The researcher started with individuals being assigned to the

experimental condition for the first 20 minutes of the research; the next 20 minutes contained the control condition. The researcher continued in this same manner alternating back and forth between the two conditions. At no time were participants made aware of the observations that were taking place.

Several precautions were taken to avoid extraneous variables. Potential participants who worked in the same department as the experimenter were excluded, as were any acquaintances of him. Men employed in the food and beverage department were also excluded due to their legal obligation to wash their hands after using the restroom.

Results and Discussion

As can be seen in Table 1, there was a significant difference between the percentage of participants washing their hands in the experimental condition (90%) and the percentage of participants washing their hands (44%) in the control condition. Thus, the hypothesis that observing another person washing his hands would lead to greater hand washing among participants was supported.

Table 1
Cross-Tabulation of Condition and Occurrence of
Hand-Washing Behavior

Condition	Did Hand Washing Behavior Occur?		Total
	No	Yes	
Control	23	18	41
Experimental	5	47	52
Total	28	65	93

Note. Pearson $\chi^2(1, N = 93) = 23.5, p < .001$.

This act of conformity (a change in behavior or belief as a result of real or imagined pressure) to the social norm is demonstrated by the difference between the control group and the experimental group. Participants were more than twice as likely to skip washing (or at least rinsing) their hands if they perceived no one to be around.

Since the mid-1950s, 133 studies in 17 countries have employed the Asch line judgment paradigm to study conformity (Cohen & Swerdlik, 2002). Just as Asch's (1955) experiments illustrated how direct intentional influence can have a strong impact on norm formations, the impact of this experiment shows how strong norm conformity can be on a subtle basis. In those studies, the participant was asked to be compliant vocally with the group or to go with his true feelings. This procedure applied more direct pressure than was displayed in our experiment, yet even with such subtle self-perceived pressure many more participants complied than when no one was present. The power of persuasion can be so subtle and so strong at the same time that many of those illustrating compliance may not even realize they are complying. An interesting additional

experiment may be to monitor the same subjects in both settings to see exactly how strong the correlation is.

This experiment, in its existing form, had a few limitations. For reasons of simplification only males were used in a single setting. However, given that Pederson, Keithly, and Brady (1986) found results similar to ours in a women's public restroom, conformity to the social norm of hand washing after using the restroom seems not to be gender-specific. In addition, the use of a riverboat casino men's restroom may limit the generalizability of the results. Replications using other settings may extend the reach of these findings. Replication using cultural or age differences can also be a consideration for future research. Different cultures hold different beliefs, and these beliefs can affect the norms of different societies. With different age groups being studied, researchers may find that the older participants are more apt to wash their hands after using the restroom or vice versa. Finally, a procedure to better monitor the use of soap, and of proper hand-washing behavior more generally, might further illuminate the effects of the presence or absence of a bystander. For instance, it is possible that the presence of another person leads one to go through the motions of hand-washing without actually (or rigorously) doing so.

Conclusion

A simple presence or absence manipulation led to a highly significant difference in the rate of male hand-washing behavior. Such an increase in compliance with hygiene norms with such a minimal change in the environment further reinforces the power of the situation to enforce social norms.

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