

## Critical Analysis of Inoculation Theory

In a 2000 study, *Conferring Resistance to Peer Pressure Among Adolescents: Using Inoculation Theory to Discourage Alcohol Use*, Godbold & Pfau used inoculation theory to determine how decisions that are motivated by peer influence or desire to fit in with perceived group norms should be addressed.

### Theoretical framework

Godbold & Pfau (2000) assessed the link between an adolescent's alcohol consumption and the influence of peers. The Kruetter, Gewirtz, Davenny, and Love study previously established that, the single best predictor of teenage alcohol or drug use is peer pressure. The Godbold & Pfau study researched the effectiveness of a peer-based resistance programs, such as inoculation theory, on teenage drinking.

Inoculation theory, according to the McGuire study (as cited in Godbold & Pfau), works by providing a message that could inoculate an individual against subsequent attacks to an attitude by providing a weakened form of that attack and then refuting it. The threat consists of the receiver's acknowledgement of the vulnerability of attitudes to subsequent influence and causes individuals to be motivated to preserve an attitude though counter-arguing. The higher the initial threat, the greater the teenager's resistance to subsequent attacks. The refutation of possible attacks provides support for the existing attitude beyond that of the threat and provides practice in defending the beliefs that are going to be under attack. Refutation provides the message

recipient with a belief that counter arguments to the attack exist and can be generated.

While the effectiveness of the inoculation theory has been proven in several studies, the effectiveness of different content of the inoculation message has not been thoroughly addressed. The Godbold & Pfau study uses two types of content message: normative and informational. The normative content uses influence to conform to the positive expectations of another and is especially effective with members of a group. Informational content relies on arguments based on facts to influence decision-making and is most effective when individuals are not highly committed to the group and decision is important. Timing is also a crucial element of the effectiveness of the inoculation because of its potential impact on the ability of an individual to formulate defensive counterarguments.

Using inoculation theory as base, Godbold & Pfau examined how best to increase the resistance of adolescents to peer-based persuasive messages to drink. The study hypothesized that normative message would confer the greatest resistance, followed by informational message and then control, with effectiveness represented by lower estimates of peer acceptance of alcohol and lower persuasion scores. Secondly, they speculated that comparatively, students who receive an immediate attack will show more resistance than participants who receive an attack two weeks after the inoculation.

## **Methods**

The research was conducted with six-grade students at middle schools in a small Midwest town and a large Midwestern city. The sample was limited to students who did not drink alcohol. The study was designed to test the effect of message type by timing of attack on the dependent variables of peer acceptance of alcohol use and the composite persuasion score. The threat component, a 30 second video warning of peer pressure to drink, was the same for all groups. The refutation portion, a two-minute video, showed countering attack. The normative group's video focused on the need to fit in with the crowd, argued that fewer adolescents drink, friends would avoid the subject if they drank and maintaining harmony in the group. The informative group's video focused on statistics regarding adolescent alcohol use, number of alcohol related deaths, injuries, and crimes, and making the right personal decision. For both messages, primary spokespersons were two adolescent males, one providing attack, one refuting pro-drinking. The attack message consisted of a normal commercial break featuring two beer commercials, a jean commercial, and a chip commercial. The control groups' video had a public service announcement for volunteering in place of the beer ads.

Students were surveyed for preliminary perceptions, demographics and then randomly assigned to groups. Two weeks later, the students were given exposure to the inoculation video or control video. Half of the participants saw the attack ad and were given a posttest questionnaire to determine the effects of manipulations. On the posttest questionnaire, researchers asked students to envision themselves in a peer pressure situation and state their feelings and

reactions. Three weeks later, the remaining participants saw the attack ad and were given the survey.

### **Conclusion**

The researchers found that participants in the normative group had the lowest estimations of peer acceptance of alcohol, while the informative group had the highest estimation. The normative group saw the least amount of change in the persuasion from the initial time to two weeks later, while the informative group saw the most change. The study also found that lower estimates of peer acceptance led to higher threat vulnerability and higher threat vulnerability led to lower composite scores. Contrary to a hypothesis, participants in the immediate attack condition fared better than participants who had a delay. Overall, the normative message went beyond affecting just perceptions and also had an influence on attitudes and behavioral intentions. Researchers concluded that decisions which are motivated by peer influence or a desire to fit in with perceived group norms should be addressed by messages that have a normative concentration.

### **Implications**

The study is valuable in that it shows how to maintain pre-existing teenage group behavior. Yet the study does have several flaws. In the study, students were asked to visualize themselves in a situation involving peer pressure and describe how they would react. The responses were used to measure the effectiveness of the inoculation theory in peer groups. If the student was not swayed by the peer pressure, then the inoculation worked.

Surveys are limited to what the participant wants to reveal and can actually differ from what the participant would do in real life. Students were never actually faced with taking action in the face of peer pressure. A student's real actions and their internal feelings could definitely be at odds, disproving the basis for the study's findings.

Second, the study essentially tests how effective it was to tell the students not do something they weren't doing. It doesn't show how the inoculation theory would fair in maintaining a non-existing group behavior, or a negatively-viewed group behavior. How well would the normative/informative messages work in promoting non-drinkers to drink, or light drinkers not to drink.

A more accurate study of the inoculation theory would need to rely on actual observations rather than student's self-reported surveys to test effectiveness, and would also study the effects of peer pressure on non-existing group behavior, or a negatively-viewed group behavior.